ADMINISTRATION REPORT

OF THE

INDIAN STORES DEPARTMENT

FOR THE YEAR

1925-26

CALCUTTA: GOVERNMENT OF INDIA
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CHAPTER I.

Summary.

By the end of the financial year 1924-25, when the Indian Stores Department had just entered the fourth calendar year of its existence, the Department was represented in most of the chief industrial and commercial centres of India. It had attracted a fairly large clientele, and was conducting operations on an extensive scale. The aggregate value of the purchases made by it during the year 1924-25 amounted to over Rs. 259 lakhs, and it inspected stores and materials during the same period of an aggregate value much in excess of that amount, in addition to carrying out 9,929 scientific tests in laboratories, covering a very wide range of materials. Much useful work had also been done in exploring the indigenous sources of supply, in encouraging firms established in India by various means to create new sources and to improve the quality of their products, and in placing Indian suppliers in touch with the purchasing departments of the State and the large public bodies, with the result that a substantial volume of business which had in previous years been placed abroad was diverted to the Indian markets.

2. The record of the year 1925-26, which is now under review, was one of continued progress in all these directions. The clientele of the Department was further enlarged, in both the Purchase and Inspection Branches, by the addition to the list of several important departments of the State, Central and Provincial, of public bodies such as Company Railways and Local Funds, and of Indian States. Judged by the statistics of value, there was no material increase in the volume of purchase work undertaken by the Department during the year, the value having risen by less than 3 per cent., from Rs. 259,11,100 to Rs. 266,67,900.

This comparison does not, however, correctly indicate the actual position. As a matter of fact, the volume of purchases effected during the year was substantially larger than in the previous year, the comparatively small increase in value being due to a more or less general reduction in prices, and also partly to keener competition among suppliers.

3. The efforts which had in previous years resulted in confining practically the whole of the textile purchase operations of the Indian Stores Department to goods manufactured in India continued to be equally successful during the year 1925-26 ; and the proportion of such purchases to the total amounted to 97.6 per cent. Every effort was also made, consistent with sound business principles, to purchase engineering and allied stores manufactured in the country in preference to stores of these classes of foreign origin ; but it was found possible to utilize Indian manufactures of these classes of stores to a comparatively small extent, the reason for this being, as explained in the report of the previous year, the comparative backwardness of the engineering and allied industries of India.

The provisions of rule 3 (*c*) of the revised Stores Purchase Rules contributed largely to the expansion of the operations for the purchase of engineering stores. All purchases made in conformity with the provisions of that rule were effected with due regard to economy, and

where necessary, arrangements were made for the efficient inspection of the stores in their country of origin, and in many cases for their practical test and final inspection under working conditions in India.

4. The volume of inspection work carried out by the Department increased in a substantial degree as a result both of the expansion of the purchasing operations of the Department and of the utilization to a larger extent than hitherto by authorities who effected their own purchases of the facilities offered by the Department in respect of this class of work. The business of the Metallurgical Inspectorate at Jamshedpur increased by 16 per cent. in volume, the tonnage of materials inspected having risen from 2,52,000 tons to 2,93,000 tons. The work of the other inspection organisations, all of which, with the exception of the Calcutta Inspection Circle, are yet in their infancy, also increased materially. The growth of the operations of the Calcutta Inspection Circle was the most striking, the value of the stores inspected having risen from Rs. 1½ crores to over Rs. 2½ crores. The increase of the orders for wagons and underframes placed in India by the Railway Board was, to a large extent, responsible for this result, though it was also contributed to in a material degree by the larger utilization by other purchasing authorities, in particular the Railways, of the services of the Circle for the inspection of important orders for permanent way materials, structural steel work, bridge work, castings, etc. The number of tests and analyses carried out by the Metallurgical Inspectorate and the Government Test House at Alipore was practically the same as in the preceding year. Both these institutions undertook a large volume of important research work in many fields, and they have fully demonstrated their value in promoting the development of the industries of the country.

5. The growth of the activities of the Department in the other fields in which it operates was also marked. Besides revising and bringing up-to-date a number of existing specifications, over one hundred new specifications were framed during the year. This is an important function, and is of considerable value in standardising purchases and in thus securing economy in supply. The Department was resorted to for technical advice in connection with a number of important schemes the cost of which amounted to several lakhs of rupees. In this matter the Department undertake the duties usually performed by firms of consulting engineers, but without any special payment or fees for these important services.

6. One result of the survey of the resources of India in the matter of supply of stores was the addition of 720 firms to the already large list of firms regarded as suitable for the entrustment of orders on behalf of Government Departments and public bodies. Advice and instruction were afforded to several suppliers with the object of improving the quality of their products and inducing them to undertake the manufacture of fresh classes of stores and materials ; and every effort continued to be made by a scrutiny of the indents placed on the Director General of Stores by indenting authorities of the State, and by other means, to bring to the notice of the trade the requirements of the State, as well as to bring the existence of sources of supply to the notice of purchasing authorities, with the result that business of a not inappreciable volume which formerly went abroad was diverted to the Indian markets.

CHAPTER II.

Organization.

7. A scheme for the expansion of the staff of the Department during the year 1925-26 was sanctioned by the Government of India. The main features of this scheme, for which a provision of Rs. 4,14,600 was made in the budget, were :—

(*a*) the strengthening of—

(1) the superior establishment of the Engineering Purchase and the Inspection Branches, and the subordinate establishment, at the Headquarters of the Department ;

(2) the superior and subordinate staff of the Bombay Circle of Purchase, the Bombay and Cawnpore Circles of Inspection, and the Metallurgical Inspectorate ; and

(3) the subordinate staff of the Calcutta Purchase and Inspection Circles, the Madras Inspection Branch and the Government Test House ;

(*b*) the constitution of a Purchase Agency at Karachi, in charge of a Controller of Purchase ;

(*c*) the creation of the nucleus of leave reserves for the superior staff of the Purchase and Inspection Branches, and for the subordinate technical staff of the Inspection Branch of the Department.

8. The Karachi Purchase Agency was established towards the end of September 1925 to meet the requirements especially of the Military Engineering Services, the Lloyd Barrage and Canals Scheme, and generally of the consuming departments in Sind and Baluchistan.

9. An Inspector of Stores under the Controller of Inspection, Calcutta Circle, was stationed at Jamshedpur for the inspection of stores, other than those dealt with by the Metallurgical Inspectorate, especially wagons and structural work manufactured by the Peninsular Locomotive Co. and Jessop and Co., and other firms in this area. An examiner of stores was subsequently appointed to assist that officer.

10. During the course of the year it was found necessary further to strengthen the subordinate establishment of the Calcutta and Bombay Purchase and Inspection Circles, the Government Test House and the Metallurgical Inspectorate in order to enable those organisations to cope with the pressure of work devolving on them ; and towards the latter part of the year, it became necessary for the same reason to divide the Engineering Purchase Branch at Headquarters into two independent Branches, each under the control of an officer of the rank of Deputy Director of Purchase, an additional appointment of Deputy Director of Purchase being created for the purpose. A small addition was also made to the clerical and menial staff at Headquarters, in anticipation of the general scheme of development proposed for the financial year 1926-27 ; and an establishment consisting of 6 technical assistants and 1 clerk was placed at the disposal of the Metallurgical Inspector in connection with the work of issuing certificates for the grant of bounties on steel ingots

under the Steel Industry (Protection) Act, so as to enable him to maintain an absolute check on the weight of ingots manufactured by The Tata Iron and Steel Co., Ltd.

11. Appendix I gives a conspectus of the organisation as it stood at the end of the year 1925-26. The appointments added during the course of the year are shown in italics.

12. The principles on which recruitment was made in the previous year for gazetted appointments and for subordinate appointments of a technical or special character continued to be observed in filling these classes of appointments. An important arrangement introduced during the year was the establishment of a Selection Committee, constituted *ad hoc* by the Government of India, for the selection of candidates for the superior appointments. Altogether 14 gazetted officers were appointed during the course of the year, of whom 7 were Indians and 7 non-Indians. All possible steps were taken to recruit Indians, but the recruitment of certain of the European officers was, as in the previous years, rendered unavoidable by the fact that the applications received in response to advertisements in the newspapers did not reveal the existence of Indians possessing the special qualifications that were needed for the particular posts. The numbers of Europeans and Indians holding gazetted posts in the Department at the end of 1925-26 were 30 and 22 respectively. The graph in appendix II indicates the respective proportions of Indians and non-Indians in the gazetted staff of the Department at various stages since its constitution in 1922.

13. The recruitment for the subordinate technical posts continued to be made entirely from the ranks of the various Indian communities.

14. Apart from the additions to the staff, the changes which occurred in the personnel during the year were comparatively few, the more important being : the grant of leave to Mr. J. S. Pitkeathly, the Chief Controller of Stores, and the appointment in his place of Mr. T. Ryan and later of Mr. K. M. Kirkhope on the departure of the latter on leave ; the departure on leave towards the close of the year of Lieut.-Colonel H. M. Alexander, the Director of Purchase and Intelligence, and the appointment of Mr. R. W. Targett to act in that post, Mr. Targett's place as a Deputy Director of Purchase being taken by Mr. D. Sadasivam, an Assistant Director of Purchase ; the retirement of Mr. H. A. F. Musgrave, Superintendent, Government Test House, and his succession by Mr. N. Brodie ; the appointment of Mr. N. N. Sen Gupta, Assistant Chemist, as Chemist on probation ; the appointment of Mr. J. Stephens, Inspector of Stores, as Controller of Purchase in charge of the newly constituted Purchase Agency at Karachi ; the resignation of their appointments by Messrs. Barefoot and Lewin, Inspectors of Stores, on the expiry of the sanctioned periods of their agreements, and by Kanwar Har Pratap Singh, Assistant Director of Purchase, on the expiry of his period of probation ; the discharge of Mr. D. R. Millar, Inspector of Stores ; and the departure of Mr. N. Garrett Smith, Assistant Metallurgical Inspector, on leave preparatory to his retirement from the service on the expiry of his agreement. Full particulars of the composition of the gazetted staff during the year will be found in appendix III to the Report.

CHAPTER III.

Work Done.

15. The functions of the Department have been described in the reports of the previous years. Briefly stated, the Department is an agency for the purchase and inspection (including the scientific testing in laboratories) in India of all classes of stores (other than foodstuffs and forage, lethal and medical stores, stationery, coal, building bricks, road metal, lime, sand, chalk, firewood, charcoal, and petty items which can be obtained locally) on behalf of such Departments of the Government, both Central and Provincial, public bodies and Indian States as may desire to utilise its services in these respects. In addition to purchasing and inspecting stores, the Department furnishes, whenever occasion arises, technical advice to its clients as to the classes of stores most suitable for their requirements ; explores the resources of India, both actual and potential, in the matter of stores, and endeavours to further their improvement, development and expansion by means of practical advice and instruction to manufacturers and producers, by bringing to the notice of these communities the requirements of the Departments of the State, by utilising Indian sources of supply to the fullest extent compatible with the principles of economy and efficiency when operating in the market itself, and by bringing their existence to the notice of the public and quasi-public consumers in India.

16. The extent to which the services of the Department have so far been utilised for the purchase and inspection of stores still remains inconsiderable when compared with the total requirements of the "consuming" Departments and public bodies ; but the operations of the year indicate a growing disposition on the part of consumers to take advantage of the facilities offered by the Department in these respects. This result is encouraging when it is realised that the use of the agency of the Department remains optional. A number of consumers entrusted the Department with a substantially larger volume of purchase work than in the previous year, the more important of these being the Military Engineering Services, the Indian Medical Service, the Posts and Telegraphs Department, the Government of India Secretariat and Attached Offices, the Opium Department, the North Western Frontier Province Police Department, the Andamans Commission, the North Western Railway, the Assam Bengal Railway, the Bombay Public Works, Police, and Jail Departments, the Punjab Jail Department, the Burma Police Department, the Central Provinces Public Works Department, the Jaipur State and the City Board of Mussoorie. The additions during the year to the clientele of the department were the General Staff and Military Secretary's Branches of the Army Headquarters in India, the Archæological Department, the Veterinary Research Institute at Muktesar, the Collectors of Customs, Bengal and Karachi, the Currency Department at Bombay, His Majesty's Mints at Bombay and Calcutta, the Meteorological Department, Bombay, the Indian Central Cotton Committee, the Imperial Public Works Division of Dehra Dun, the Chief Commissioner of Delhi, the Agent to the Governor General in Central India, His Britannic Majesty's Consul for Sistan, the British Envoy at the Court of Nepal, the Bombay, Baroda and Central India, the South Indian, the Bengal Nagpur and Burma Railways, the Police, Jail, Edu-

cation and Medical Departments in the Madras Presidency, the Sanitary, Agricultural, Forest, Revenue, Judicial and Political Departments in the Bombay Presidency, the Judicial Department in the Bengal Presidency, the Public Works, Printing, Medical and Revenue Departments in the United Provinces, the Hydro-Electric Branch of the Public Works Department of the Punjab, and the Registration, Revenue, Judicial and Financial Departments in that Province, the Public Works, Police and Medical Departments in Bihar and Orissa, the Revenue, Judicial, Forest and Excise Departments in the Central Provinces, the Public Works, Printing, Revenue, Jail, Police and Political Departments in Assam, the States of Mysore, Indore, Rajkot and Balapur, the Simla Municipality, the District Board of Muzaffarnagar, the Commissioners for the Port of Calcutta.

17. The total number of indents dealt with by the Department was as follows :—

	No. of indents.	No. of items.
Headquarters	3,016	16,128
Calcutta	1,740	12,051
Bombay	1,157	7,645
Karachi	488	3.661
Total ..	6,401	39,485

18. The total value of the purchases made during the year amounted to Rs. 2,66,67,933 as against Rs. 2,59,11,141 during the preceding year. Of the former sum, Rs. 1,18,81,516 represented the value of textile goods, and Rs. 1,47,86,417 the value of engineering and allied stores.

Appendix IV exhibits the details of the purchases in comparison with those effected during each of the preceding three financial years.

19. The decrease of about Rs. 14½ lakhs in the value of the textiles purchases is to a large extent more apparent than real, though it was contributed to in some measure by a decrease of the requirements of the Army. It was due partly to a fall in prices, ranging from 10 to 15 per cent., to the suspension and subsequent abolition of the Cotton Excise Duty, and to the late submission of indents which operated so as to prevent the letting out of contracts until shortly after the close of the year. It is partly to both these causes that the decrease of about Rs. 5 lakhs in the value of the purchases made for the Railways is attributable.

The purchases of textiles made for other departments of the Central Government and for Provincial Governments, Indian States and Public Bodies increased by approximately Rs. 1,69,000 and Rs. 1,06,000, respectively. This is satisfactory indicating, as it does, the more extended utilisation of the services of the Stores Department by other departments of the State, the Indian States and the large public bodies.

The departments of the Central Government which chiefly contributed to this increase were the Director General, Indian Medical Service, and the Posts and Telegraphs Department, the former accounting for over Rs. 2 lakhs and the latter for over one lakh of rupees of the increase.

The larger purchases for the Director-General, Indian Medical Service, were to some extent due to the entrustment of the department for the first time with a large demand for surgical dressings. The textiles purchases for the Medical Department have now all been standardised. Standardisation has also been effected in respect of bags and paulins, uniforms for menials, ropes and cordages, and twines of various descriptions required by the Postal Department.

The chief customers of the department for textile stores from the Provinces and the Indian States were the Bombay Police, Prisons and Public Works Departments, the Punjab Police, Prisons and Public Works Departments, the Bihar and Orissa Prisons Department, the Burma Police Department, the Assam Police Department, and the Jammu and Kashmir State Police Department.

20. There was an increase of about 17 per cent. (from Rs. 1,25,84,188 to Rs. 1,47,86,417) in the value of the engineering and allied stores purchased during the year. The increase in the volume of this work was really larger than these figures indicate, since the general level of prices was lower than in the previous year. The total value of the purchases made for the Central Government (Civil) Departments decreased by approximately Rs. 6 lakhs ; but on the other hand the Departments of Provincial Governments and the Indian States and Municipalities, who are under no sort of obligation to utilise the services of the Stores Department, increased the value of their purchases by approximately Rs. 13 lakhs and 6 lakhs respectively.

21. As was to be expected, the bulk of the engineering and allied stores purchased were of foreign origin. On the other hand, practically the whole of the textile goods bought were of Indian origin, the proportion of goods of foreign manufacture that were purchased amounting to 2.4 per cent. only. Appendix V exhibits the total purchases made by the Department during the past four years, the value of indigenous and imported stores being shown separately in the case of textile goods.

22. As will be observed from the series of diagrams and the statistics given in appendix VI, the business of the Department, more especially in the case of textiles, was, as in previous years, distributed all over the country.

23. The following were the more important purchases made during the year under report :—

Textiles.	*Amount.*
	Rs.
Blankets	17,66,000
Tents and components	15,00,000
Drill, khaki, and drab dark	10,58,000
Socks, woollen	8,39,000
Gunny bags	5,81,000
Cotton waste	5,48,000
Drill, white and coloured	4,68,000
Flannelette, Mark III	3,29,000
Yarn, cotton	3,27,000

	Rs.
Jhools and rugs	2,80,000
Felt	2,62,000
Cordages and ropes	2,60,000
Hessian and gunny cloth	2,49,000
Bags, waterproof	2,38,000
Bags, postal	2,25,000
Putties, woollen and cotton	2,21,000
Jean	2,05,000
Pagri cloth	2,03,000
Paulins	1,66,000
Blanketting cloth	1,62,000
Cotton wool absorbent	1,37,000
Long cloth	1,05,000
Jackets, cardigan, and jerseys	1,01,000
Greatcoats and cloth	98,000
Durries, cotton and woollen	95,000
Twill, cotton	85,000
Gauze cloth for surgical purposes	83,000
Serge, woollen	80,000
Cambric, mulmul and muslin	77,000
Sheets, barrack	75,000
Serge lining	72,000
Carpets, pile	68,000
Twine, jute, hemp, cotton, etc.	68,000
Chaguls	65,000

Engineering and Miscellaneous.

	Rs.
Dragline excavaters	17,69,000
Axle oil	7,49,000
Creosote	7,20,000
Kerosene oil	6,70,000
Pile driving plant mounted on pontoons ..	6,22,000
Cement	3,75,000
Electric power plant for Jaipur State	3,75,000
Electric fans	3,67,000
Road rollers	3,12,000
Fuel oil	2,90,000
Steel barges	2,24,000

	Rs.
Cylinder oil (ordinary)	2,17,000
Linseed oil	1,68,000
Light railway track	1,55,000
Poles, tubular	1,30,000
Tubes, Victualic steel	1,21,000
Bridge work for Islam weir	1,15,000
Cylinder oil	1,13,000
Steel moulding boxes	95,000
Steel bins for tyres and tubes	92,000
Steel tanks of various sizes	83,000
Electrical power plant for Jhansi	75,000
Fire and pumping engines	74,000
Safes	69,000
Mortar mills	62,000
Pumping plant for Multan	57,000
Air Compressors	50,000
Electrical power plant for Razmak	49,000
Locomotives	49,000

24. The services of the local purchasing agencies of the Department at Calcutta and Bombay which were in existence at the commencement of the year were utilised to an appreciably larger extent during the year, and both these organisations were permitted to place business with firms located in certain parts of India outside of Calcutta and Bombay respectively. The number of indents received during the year by the Calcutta Circle of Purchase amounted to 1,740, consisting of 12,051 items against which 4,458 orders were placed. The total value of these orders amounted to Rs. 23,40,000 as compared with Rs. 16,03,000 during the preceding year.

The total number of indents received by the Bombay Purchase Circle amounted to 1,157, comprising 7,645 items. The number of orders placed was 2,360 of the aggregate value of Rs. 7,23,000 as against Rs. 1,78,000 during the seven months of its existence in the year 1924-25.

In paragraph 29 of the previous year's report, mention was made of the necessity which had arisen for the constitution of an organisation for making purchases in Karachi and in paragraph 8 *ante* it has been stated that a Purchase Agency was established in that city in September 1925. The number of indents received by this agency amounted to 488, against which 841 orders were placed, consisting of 3,661 items, aggregating Rs. 3,51,000 in value.

All the three organisations have proved of appreciable use to indenting officers situated in or about the Provinces in which they are established, and of particular value to indentors located in places which are distant from industrial and commercial centres and are also remote from the Headquarters office of the Department ; and they have facilitated the economical and expeditious supply of stores to these authorities. They are entrusted with numerous purchases of comparatively small value and

have proved of considerable assistance to the Department in effecting such purchases. In addition to carrying out actual purchases, their services have frequently been requisitioned by other Departments for the supply of information regarding sources of supply, the ruling market prices, etc., and the work done by them in this connection has been the means of attracting several new clients to the Department. It is on these agencies, as well as on the local inspection agencies, that the Department has to depend to a large extent for the ascertainment of sources of supply and for the determination of the suitability of firms for enrolment on the various lists of suppliers maintained by the Department.

25. The diagrams given in appendix VII indicate the volume of business transacted by each section of the Purchase Branch of the Department during the past four years.

26. The establishment and strengthening of the inspection agencies at the chief industrial and commercial centres in the country during the year 1924-25 and in the preceding years enabled the administrative Inspection Branch to devote a much larger proportion of its time to its legitimate duty of exercising general control over the inspection work of the Department, of devising improved methods of inspection, of conducting a technical scrutiny of important schemes and of drawing up new and revising existing specifications.

27. Twenty-five existing specifications were revised, five of them twice, in the light of the further experience which had been gained so as to bring them into accord with the latest modern developments; and 117 new specifications were drawn up, of which 18 were for special classes of stores. A complete list of the specifications issued up to the end of March 1926 is given in appendix VIII, but a record here of the more important of those issued during the year will probably prove of interest. These were the following :—

1. Steelwork for tip trucks for 1′—6″, 2′—0″ and 2′—6″ gauge railway, contrator's type.
2. High speed engine superheated steam cylinder oil, pure mineral, filtered, for O. and R. Railway.
3. High speed engine superheated steam cylinder oil, compounded, filtered, for O. and R. Railway.
4. Oil, lubricating crank chamber, high speed steam engine No. 2, for O. and R. Railway.
5. Oil engine driven power plant for the New Power Station, Municipal Board, Mussoorie.
6. Plant for hydro-electric scheme, Municipal Board, Mussoorie.
7. Oil engine driven power station for Jaipur.
8. Oil engine driven (diesel) Bucyrus dragline excavators, 30 B, for the Lloyd Barrage Works, Sukkur.
9. Oil engine driven (diesel) Bucyrus dragline excavators, 50 B, for the Lloyd Barrage Works, Sukkur.
10. Oil engine driven (diesel) Bucyrus dragline excavators, 30-B (modified type), for the Lloyd Barrage Works, Sukkur.

It may be observed here that, although these specifications are drawn up primarily for use in connection with the operations of the Department itself, they are freely distributed to other Departments and are also supplied to any manufacturers who desire to utilise them.

The preparation of specifications has, apart from their usefulness in ensuring the supply of goods of the required quality, done much to bring about the standardisation of qualities, which has facilitated the co-ordination and bulking of the demands of different Departments and thus securing economy in supply.

28. A function allied to the preparation of specifications, but of which mention has not previously been made, is the preparation of comprehensive "Schedules of Requirements". These Schedules indicate in considerable detail the precise requirements in respect of the stores in demand, and are of great value both to the suppliers in initially tendering for and subsequently delivering the stores ordered, and also to the department and the consumer in ensuring that the stores supplied are actually of the quality and class ordered. During the year under report, 159 schedules were framed and 11 previously framed were revised. A list of these will be found in appendix VIII-A.

29. A number of schemes were subjected to technical scrutiny by the Department in its capacity of technical adviser and consultant in regard to the classes of stores or equipment required for particular purposes. Typical instances of these are Electric Power Plants for Ferozepur and Nagpur for State Railways and a large Pile-Driving Plant, the aggregate cost of which amounted to many lakhs of rupees.

30. The total number of "erection at site" orders which were dealt with by the Inspection Branch at Headquarters during the year 1925-26 was 25 aggregating Rs. 19,38,000 in value. In addition the Branch carried out the inspection of a considerable amount of work on orders placed in 1924-25.

31. As explained in paragraph 23 of last year's Report, the Director of Inspection is the certifying authority for the payment of bounties on iron and steel Railway wagons. During the year under review, the total number of bounty certificates for wagons issued was 162, covering 1,421 wagons, in respect of which bounties amounting to Rs. 8,79,800 were paid

32. Two pamphlets were issued during the year entitled respectively "Testing Equipment for Automatic Vacuum Brake Components at the Government Test House, Alipore" and "Notes on Paints, etc."

33. The extension of the utilisation of the Department for the purchase of stores naturally reacted on the Inspection Branch, and had the effect both of increasing the volume of stores dealt with by that Branch in past years for old clients of the Department and also of giving it the opportunity of undertaking inspection for other consumers; for the Department ordinarily stipulates that it shall inspect the stores which it has purchased. But the services of the Inspection Branch were also utilised in a larger degree than during the preceding years for the inspection of plant and materials purchased directly by other Departments, etc., both by those which had previously entrusted this class of business to the Department and also by those which had not previously utilised it for that purpose. Of the former the more important were the Railways, in particular the

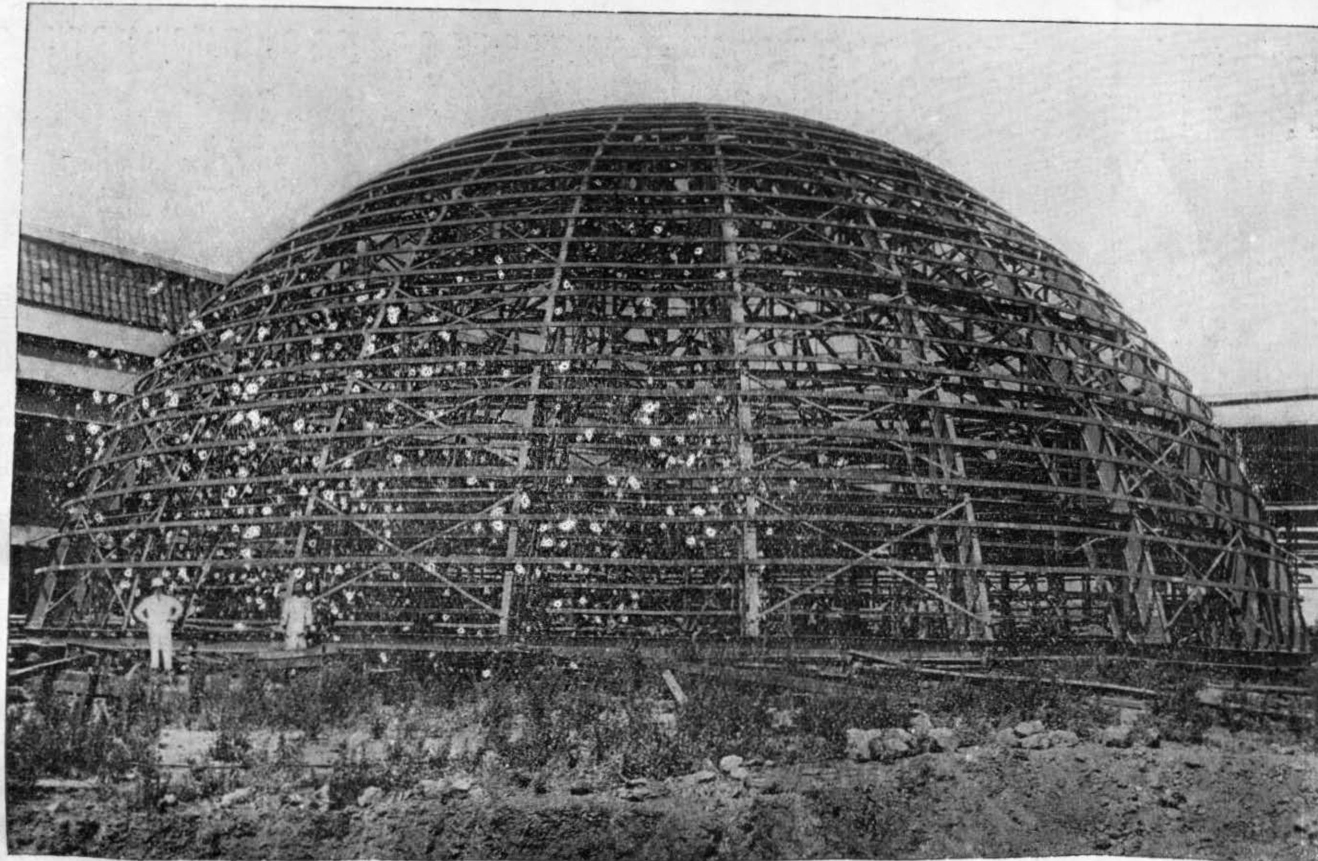
Eastern Bengal, the North Western, the Bengal Nagpur, the Great Indian Peninsula, the Bombay, Baroda and Central India and the Assam Bengal Railways. Those which for the first time entrusted the Department with the inspection of materials purchased by themselves were the Barsi Light Railway, the Public Works Department, Central Provinces, and the Stores Purchase Committee of the Mysore State. The indications point to a substantial expansion of this class of business during the next year, requisitions for inspection during that year of large quantities of stores having already been received from the East Indian and Great Indian Peninsula Railways.

34. The volume of work carried out by each of the Inspection Agencies in comparison with that undertaken in one or more of the preceding years is indicated in the diagrams in appendix IX. Statistics of the inspection work carried out by the Headquarters Administrative Branch, to which reference is made in an earlier paragraph, were passed through and are accounted for by the Provincial Inspectorates.

35. It will be observed from the diagrams that there was a satisfactory increase of business during the year under review, more especially in the Calcutta Circle of Inspection, which is the oldest established organization of this kind in the Department.

The number of orders for inspection received by the Calcutta Circle of Inspection amounted to 5,957 against 3,800 in the previous year. The bulk of the work of this Circle is connected with the inspection of stores purchased by other authorities, principally the Railways, the value of such work having amounted to Rs. 2,15,92,000 in the year 1925-26 as compared with Rs. 46,99,000 which represents the value of the orders placed by the Stores Department and inspected in the Circle. The orders where inspection only is carried out by the Indian Stores Department are practically all manufacturing orders for rolling stock, castings, permanent way materials, bridge and structural steel work and miscellaneous stores, all of which require careful inspection throughout the various processes of manufacture. Wagons and underframes were the most important items dealt with by this Inspectorate, it having received during the year orders for the inspection of 588 wagons. Orders have since been received for the inspection during the ensuing financial year of wagons aggregating in value Rs. 99,76,552. Permanent way materials is the next important item though a good deal of work was carried out in connection with the inspection of cast iron pot sleepers of considerable value for the Great Indian Peninsula and the Madras and Southern Mahratta Railways and of cast iron plate sleepers for the North Western Railway. Another important class of work carried out during the year was the inspection of several orders for bridge and structural steel work, the more important of these being the Sulemanki Weir Bridge, the Islam Weir Bridge, bridge work for the Central India Coal Fields Railway, consisting of 24 spans—60 ft., 20 spans—40 ft., 2 spans—20 ft., plate girders for the North Western Railway of 3 spans—80 ft., and the Lucknow Station Remodelling.

The total value of stores inspected during the year amounted to Rs. 2,62,90,650, which represents an increase of 71 per cent. over the value of stores (*viz.*, 1,54,04,298) inspected during the preceding year. Of the increase of Rs. 1,09,00,000, Rs. 77,00,000 is explained by the fact that the value of the orders placed in India in 1925-26 for wagons, bogies and underframes amounted to Rs. 1,13,00,000 against the abnormally low



LIBRARY DOME FOR LEGISLATIVE BUILDING,
IMPERIAL DELHI.

figure of about Rs. 36,00,000 in the previous year. Omitting from the figures of both years the value of the orders for wagons, etc., the work of the Inspectorate shows a substantial increase of 26 per cent.

36. The work of the Bombay Inspection Circle also shows a marked increase over the operations of the preceding year, even allowing for the fact that it was not in working order for the whole of 1924-25. During the latter part of 1925-26, the Circle was entrusted with the inspection of orders aggregating over Rs. 52½ lakhs placed in the Bombay Presidency by various Railways. The effect of this will appear in the ensuing financial year, and there is every indication that the Circle will be utilised in an increasing degree for work of this nature in the future.

The need for a Test House in Bombay is now becoming apparent, as the testing facilities available in this area are very limited. To meet the most pressing requirements in this respect, certain testing apparatus and plant have been installed in the Office of the Inspectorate, and valuable work was carried out in connection with the testing of textiles materials. Additional plant and apparatus to enable this class of work to be expanded in the future will be provided as soon as possible. The facilities for testing engineering materials were found to be very inadequate. This is a very important function of the Department, and steps will be taken for providing the additional plant necessary for the proper discharge of this work.

37. The record of the Cawnpore Inspection Circle is also one of expansion during the year, the number of orders received having amounted to 777 as compared with 221 during the previous six months of the existence of the Circle. The value of the stores inspected increased from Rs. 5,09,653 during the half year 1924-25 to Rs. 46,63,297 during the year under review.

Among the more important inspections carried out by this Circle, either wholly or in part, the following may be noted :—

(1) A complete Electrical Power Plant for new Delhi, comprising water tube boilers, steam main, feed pumps, steam turbine, condensing plant, switchboards and all auxiliary plant.

(2) The inspection at site and during erection of the structural steel work for the Legislative Building in the new Capital, the whole of which, it is interesting to note, was manufactured in India and fabricated by Indian labour. An illustration of the work appears opposite.

(3) A complete Electrical Power Plant for the Lloyd Barrage and Canals Construction Works at Sukkur, comprising six oil engine driven alternators, cooling arrangements, transformers, switchboards and all auxiliary equipment. The total output of the plant amounts to 2,350 Killowatts.

38. The work of the Karachi Inspectorate similarly shows a marked increase, namely, nearly 100 per cent., the value of the stores inspected being Rs. 41,11,538 during 1925-26 as compared with Rs. 21,06,600 in 1924-25. The greater portion of this work was carried out on behalf of the Chief Engineer, Lloyd Barrage and Canals Construction Scheme, and the Military Engineering Services. During the early half of the year and up to the formation of a separate purchasing organization at Karachi, the services of the Inspection Agency were utilised as a temporary expedient

for the purchase of stores in Karachi, the value of the purchases made having amounted to Rs. 2,31,000 approximately.

39. The Inspection Agency at Madras is a comparatively small organization and is mainly occupied with the inspection of textile goods purchased by the Department from firms in the Madras area, though it undertook a certain amount of inspection of engineering materials. The work during the year under review exceeded that during the preceding year, and indicates the necessity for an organization of this character at Madras.

40. Appendix X shows the volume of the inspection work carried out by the Department during the past four years on behalf of the different sections of its clients.

41. In addition to inspecting plant and materials, these organizations devoted much time to the inspection of various firms desirous of being enrolled on one or other of the lists of suppliers maintained by the Department, and to the practical instruction of manufacturers in the improvement of their processes.

42. Before turning to the special activities of the other two sections of the Inspection Branch of the Department, namely, the Metallurgical Inspectorate and the Government Test House, an account of the procedure followed by the Department in dealing with demands made upon it for stores may be found interesting, and accordingly a brief summary of the methods employed is sub-joined.

43. The Department holds no stocks of stores of any kind, but operates only on the receipt of definite requisitions embodied in indents prepared in the form prescribed for the purpose. The indents should contain full particulars of the stores required and be accompanied by copies of specifications, drawings and samples where these exist. It is also important that they should indicate the purpose for which the stores are required ; for, if this purpose is known to the Indian Stores Department, it may be possible for it to suggest for consideration by the indentors slight modifications in quality or type which would render possible the standardisation among Government indentors of various articles or materials, thus facilitating supply and reducing cost. The indents should in each case contain an estimate of the cost of the stores specified therein and a certificate to the effect that funds are available in the Department concerned to meet the cost of the stores indented for.

44. On receipt of an indent supply is arranged in one of two ways—either by placing a separate order for the stores demanded, or by combining the demands with others for compliance under a " rate " or " running " contract.

A " running " contract is a contract for the supply of an approximate quantity of the stores detailed in the schedule annexed thereto at a fixed price during a certain period. The approximate requirements of a number of indentors for the period in question are combined, and the contract provides that any of these indentors may demand their requirements at any time during the period of the contract either direct from the firm concerned or by indent on the Department. Demands against these contracts are carefully watched, and the contract usually provides for an increase or decrease of the approximate quantity specified in the Schedule. If at any time during the currency of the contract it appears that that quantity is likely to prove a considerable under or over estimate adjustments are

made as necessary. The great advantage of this type of contract is that it enables the small indentor to obtain the benefit of prices quoted for large quantities.

A " rate " contract is a contract for the supply of the stores detailed in the schedule attached thereto at fixed rates during the period covered by the contract. No quantities are mentioned in the contract, and the contractor binds himself to accept any order which may be placed on him by the Department at the rate specified. Favourable quotations are usually obtained for this type of contract, because the contractor is assured of regular demands. It has the further advantage to the indentor of enabling him to obtain his stores without the delay involved by calling for tenders for each demand.

During 1925-26, " running " or " rate " contracts existed for the following descriptions of stores :—

TEXTILES.

Cottons.

(1) Drill, grey, bleached and dyed.
(2) Twill, khaki.
(3) Pagri cloth, khaki.
(4) Pagri cloth, white muslin.
(5) Putties, cotton, khaki.
(6) Cotton waste, coloured.
(7) Cotton waste, white axle box packing.
(8) Postal dosuti bags.
(9) Lining cloth.
(10) Waterproof cloth.
(11) Tape.
(12) Umbrellas.
(13) Dosuti cloth.
(14) Wicking, cotton.
(15) Webbing, cotton.
(16) Dusters.
(17) Table cloths.
(18) Sheets, bed.
(19) Towels.
(20) Cotton, raw, carded.
(21) Leather cloth, green.
(22) Durries, cotton.

Woollens.

(23) Broad cloth, superfine, scarlet.
(24) Serge, twill, khaki, yellow and other colours.
(25) Blankets, barrack.

Jute, Flax, etc.

(26) Paulins, flax.
(27) Paulins, jute.
(28) Tat patties.
(29) Postal bags, mail.
(30) Rope, manilla.

Miscellaneous.

(31) Gold lace.
(32) Gold neckgear.
(33) Gold tassels.
(34) Gold buttons.
(35) Hides, tanned, cow and buffalo.
(36) Boots, ammunition.
(37) Skin, goat.

ENGINEERING.

(38) Electric Fans, ceiling, direct current, large.
(39) Electric Fans, ceiling, direct current, small.
(40) Electric Fans, ceiling, alternating current.
(41) Electric Fans, table, direct current.
(42) Electric Fans, table, alternating current.

Electric meters of following makes :—

(43) Ferranti.
(44) Chamberlain and Hookham.
(45) Metropolitan—Vickers.
(46) Electric and Accessories.

(47) Electric lamps.
(48) Vulcanised India rubber cable 3|.029.
(49) Sea service kit boxes.
(50) Padlocks and box locks.
(51) Cement.
(52) Fuel oil.
(53) Kerosene oil.
(54) Lubricating oils.
(55) Linseed oils, raw and double boiled.
(56) Paints.
(57) Creosote.
(58) Rubber tyres and tubes.
(59) Cast iron pipes. In small quantities—large demands are dealt with outside the rate contract.
(60) Cast iron specials. In small quantities—large demands are dealt with outside the rate contract.

45. If an article indented for is one that cannot be purchased under an existing "rate" or "running" contract, the specification, drawing, or sample, if any of these is forwarded, is subjected to technical scrutiny by the staff of the Department with the object of ascertaining whether it will serve to ensure the supply of the description of article most suited for the required purpose. If no specification or drawing is forwarded, the preparation of these is undertaken by the Department, which at the same time prepares a "Schedule of Requirements" to which reference has already been made in paragraph 28. It will, of course, be understood that specifications, drawings and schedules of requirements are only prepared in cases where they are needed to elucidate the actual requirements. The demand is then put out to tender. This is done either by advertisement in the Indian Trade Journal, and in important cases, in the leading newspapers as well, or by means of the distribution of tender forms to all firms, which, in the opinion of the Department, are likely to be in a position to undertake efficient supply. In the more important cases in which the financial issue involved is considerable tenders are invited from abroad

through the Director General, India Store Department, London, as well as by public advertisement in India.

The tenders are required to be forwarded to the Department in sealed covers. In the case of those invited through the Director General, India Store Department, the tenders are opened by that officer on the day fixed for the opening of tenders received in India and the lowest satisfactory tender received in London is usually telegraphed to the Chief Controller of Stores. But in cases involving the supply of complicated equipment, the procedure followed is that complete tenders are forwarded by post with the Director General's recommendations. The tenders received in India are opened on the specified date in the presence of such representatives of the firms tendering as may attend and the name of each tenderer with the price quoted by him is announced.

The contract is let to the lowest satisfactory tenderer having regard to various considerations, such as the price and quality of the goods offered, the *locales* of the tendering firms in relation to the destination of the goods, the stipulated time of delivery, and the capacity of the firms to execute the order satisfactorily. In the event of the lowest satisfactory quotation being considerably higher than the amount estimated by the indentor, a reference is made to him before the order is actually placed. In the absence of any special instructions on this point, the practice is to refer to the indentor if his estimate of the total cost of the stores demanded in any one case is likely to be exceeded by 10 per cent. or Rs. 10,000, whichever is less, except when the total cost is not more than Rs. 1,000 in which case no reference to the indentor is made.

In cases in which the most satisfactory tender is received through the Director-General, India Store Department, the indentor is informed accordingly and advised to place his order with that authority.

Copies of all orders placed by the Department, with the relevant documents, are forwarded to the indentor and the consignee where these are not one and the same authority, to the Audit Officer, Indian Stores Department, and to the appropriate inspection agency of the Department, when inspection is to be undertaken by the Department. A statement containing particulars of all orders of Rs. 100 or more in value placed by the Department is published weekly in the Indian Trade Journal for the information of the general public. This list has recently, in partial response to a demand from the trading community, been supplemented by particulars of the contracts placed on behalf of the Central Government by the India Store Department, London, as the result of tenders invited simultaneously in India and in England.

46. Inspection is carried out with close reference to the specifications, drawings, or samples, where these exist, both during manufacture in cases in which manufacture is undertaken in India and after completion of manufacture. In all cases every effort is made to ensure that the articles supplied are what have actually been ordered and are suited for the purposes for which they are required.

Particular attention is devoted to ensuring the observance on the part of contracting firms of the terms of the contracts in regard to the date of delivery of supplies. Unfortunately, the Department has frequently experienced great difficulty in the past in securing the attainment of this object. Time is often one of the most important features of a contract, and any delay in the delivery of supplies is calculated to cause not only serious administrative inconvenience but often a substantial loss of public funds.

The uncertainty which frequently exists as to the ability of many firms in India to deliver supplies within the specified time limit is one of the reasons which make purchasing authorities in India reluctant to place orders in the country. This is a very natural attitude on their part, having regard to the importance of the financial and other issues involved, and it therefore behoves suppliers in the country in their own interests to devote more attention than has hitherto been paid in many cases to this matter and to take all possible steps to remedy this defect.

47. Payments for all stores purchased by the Department are made by the Audit Officer, Indian Stores Department, on the presentation to him of the necessary documents. In the interests of suppliers, arrangements have been made for the payment of 90 per cent. of the total amount of a bill on the production of evidence of the despatch after inspection of the stores to their destination, the balance of 10 per cent. being paid on the receipt of a certificate from the consignee of the receipt by him of the goods in proper order at destination. These terms are varied in certain classes of cases so as to provide for the final instalment of payment after inspection at site. These arrangements provide for suppliers being paid the bulk of their dues in a much shorter space of time than usually elapses in the payment of bills for supplies made to Government Departments, and the Department has good reason to believe that, as a result, it is able to command more favourable prices than those obtainable by the ordinary public purchaser.

48. It has been stated in paragraph 45 *ante* that the requirements of the Department are brought to the notice of the trade either by means of public advertisement or by direct invitations to tender. The first method is adopted in cases in which the amount involved is not less than Rs. 5,000 and the time of delivery allowed by the indentor for the supply permits of advertising. The second method is adopted in cases in which the demand is below Rs. 5,000 in value, or exceeding that amount, is either of an emergent nature or relates to a proprietary make of goods.

49. It is probably well known generally that the purchase of stores in India for Departments of the Central Government is, under the provisions of the Stores Purchase Rules, dependent in many cases on the result of a comparison between the prices quoted in India and the costs, landed in India, of similar stores if imported through the agency of the Director General, India Store Department. In estimating the landed costs various items have to be taken into consideration in addition to the actual Home price, such as interest, insurance, freight and freight brokerage, customs duties at the ports, etc. In order to assist purchasing authorities to estimate these costs, the Government of India have decided that the Indian Stores Department should, on receipt of specific requests, furnish purchasing authorities with such information on these points as may be available in the Department. It has also been decided that, for the purpose of comparison, the sterling price of an article in Great Britain should be converted into Indian currency at an uniform rate of 1*s*. 6*d*. to the rupee.

50. The graph in appendix XI compares the expenditure on stores and freight incurred by the London Stores Department with the value of the purchases effected by the Indian Stores Department during the years 1922-23, 1923-24 and 1924-25. The statistics of the expenditure in the London Stores Department during the year 1925-26 have not yet been received. A comparison is also made of the number of contracts let by the two organisations during the three years ending 1924-25.

CHAPTER IV.

The Metallurgical Inspectorate.

51. The diagrams in appendix IX (*vii*) compare the work done and the fees earned by the Inspectorate during the year 1925-26 with the corresponding results of the previous years.

52. The greater part of the work of this organisation consisted of the inspection and testing of the products of The Tata Iron and Steel Co. embracing rails, fishplates, pressed steel sleepers, bearing plates, structural steel of various sections and steel for special purposes.

The duties of the Inspectorate have recently been increased by the sampling and analysis of the entire output of sulphate of ammonia manufactured by The Tata Iron and Steel Co. The weight of the samples tested since November 1925 is approximately 2,300 tons. This work was undertaken on behalf of the British Sulphate of Ammonia Federation, Ltd., and will in all probability form a permanent feature of the work of the Inspectorate.

During the early months of the year, a considerable amount of inspection at the works of the Indian Cable Co., Ltd., of hard drawn copper wire was undertaken for the Posts and Telegraphs Department. A considerable volume of work was also carried out for the Tin Plate Co. of India, Ltd., with which a fresh contract was entered into for the inspection of tin-bar manufactured for the Company by the Tata Iron and Steel Co., Ltd.

53. In addition to inspection and testing work, a number of investigations were made by the Inspectorate on the failure of metals embracing a wide range. Many of these investigations were carried out on behalf of the Railways on materials which in service had shown some defects. Other investigations were undertaken for the Department and for private firms.

54. A total quantity of over 120,000 tons of first class rails and fishplates manufactured by The Tata Iron and Steel Co., Ltd., and inspected by the Metallurgical Inspectorate were certified for the payment of bounty to the Company during the year, the total payments made aggregating over Rs. 31 lakhs. Certificates for payment of bounties amounting to Rs. 43½ lakhs to The Tata Iron and Steel Co., Ltd., were issued in connection with the production of steel ingots during the year.

55. An important addition to the equipment of the Inspectorate was made by the installation in the physical laboratory of a photo-micrographic outfit of the latest pattern obtainable. A complete list of the apparatus provided will be found in appendix XII.

56. For years past the accommodation of the staff of the Inspectorate has presented certain difficulties. The facilities available at Jamshedpur in this respect are restricted, and the Department has had to depend on the goodwill of The Tata Iron and Steel Co. for the accommodation of the bulk of the staff, Government having provided accommodation for only three of the officers and a portion of the subordinate staff. Owing to the extension of their own business, it became uncertain whether the Department could rely on The Tata Iron and Steel Co. being in a position much longer to spare the buildings which they had leased to Government, much less to provide accommodation for the additional staff entertained at the Inspectorate; and it was therefore decided by the Government of India to proceed with a

scheme for the construction of additional Government quarters for the staff. The scheme as originally sanctioned in 1925-26 provided for the construction of four officers' quarters and twenty-three quarters for subordinates and menials at a total estimated cost of Rs. 2,13,200. The work was entrusted to The Tata Iron and Steel Co., and it was found possible to provide one additional subordinate's quarter within the total amount provided. All these quarters were completed before the close of the financial year. A few additional quarters are required to accommodate the entire staff in Government buildings, and a scheme for the provision of these, which has been drawn up and has received the sanction of the Government of India, will be put into execution during the ensuing financial year. Provision has been made in this supplementary scheme for the construction of quarters required for the portion of the staff of the Calcutta Circle of Inspection which is located at Jamshedpur.

CHAPTER V.

The Government Test House.

57. The work done at and the earnings of the Test House during the past four years are shown in the diagrams in appendix IX (*viii*).

58. The period under review has been one of steady progress in the development of the establishment. There has been a further increase in the number of samples tested and, what is more indicative of the technical development, an enlargement of the sphere of the work and investigations which are undertaken.

Of the total number of samples tested (6080), the Physical Section dealt with 2256, the Chemical Section with 1968, and the Oil Section with 1856.

The investigation of the properties and characteristics of paints and allied substances has been continued and a series of standard shades has been introduced as standards in connection with paint supplies for the Army Department and the Indian Stores Department contracts.

A report was issued on the investigations which are proceeding of the weathering and protective properties of the paints and other allied materials in general use by the various State Departments.

Extended investigations into the physical and chemical properties of all the reputable lubricating oils marketed in India and in use by the various State services have been initiated with a view to enlarging the available knowledge regarding the properties of the various grades of oils sold by the large oil manufacturing companies.

Inspections of chemical and paint factories in the Calcutta area with a view to their inclusion in the lists maintained by the Indian Stores Department of approved manufacturers have been carried out as required, and opportunities were taken for the officer in charge of the Physical Branch to visit the Works of the Sone Valley, the Jubbulpore and Central Provinces Portland Cement Companies.

The acquisition of further plant and apparatus and the entertainment of increased staff to cope with the increasing variety of the work has continued and is referred to in greater detail under the various sectional parts of this Chapter.

Physical Section.

59. The number of cement samples tested during the year was 590, the monthly receipts during the last four months of the year showing an increase of 50 per cent. on the previous monthly average.

The demands for tests and examination of samples of supplies for use on the larger engineering projects, such as the Sukkur and Sulemanki Irrigation Schemes and King George's Dock, continued.

The testing of the anti-abrasive properties of blue-bricks for which a special testing machine was designed and made was continued on behalf of the Calcutta Port Commissioners in connection with the works on King George's Dock.

The testing of samples of Railway Vacuum Brake Components on the test-plant installed towards the end of the previous year was undertaken for a number of the supplies' and manufacturers' agents and for the East Indian, Great Indian Peninsula and Bengal Nagpur Railways.

The number of textile samples tested was maintained, and the section carried out a series of investigations on proofed and unproofed flax canvases to determine the effect of varying humidity on their tensile strengths and other physical properties with a view to remodelling the testing clauses of specifications in connection with these materials. These investigations were spread over a period of some eight months and showed, *inter alia*, the very considerable increase in strength given by unproofed flax canvases with increase in the relative humidity of the air, which in Bengal varies in the day-time from 30 per cent. in the driest period of the year in March to over 90 per cent. during the monsoon.

The number of direct current ceiling fans tested on behalf of the Purchase Branches of the Department and of manufacturers showed no diminution. A new make of fan manufactured entirely in India and known as the "India" fan was tested and showed a particularly low current consumption but also a somewhat low air-displacement for its size and blade sweep. Certain suggestions have been made to the manufacturing firm with a view to improvement, and in order to determine results in actual practice a small trial order has been placed.

Towards the end of the year tests of alternating current ceiling fans representing types made by some of the foremost manufacturers were undertaken for the first time, in connection with Indian Stores Department contracts. As the necessary alternating current supply is not yet available at the Government Test House, arrangements were made to carry out the tests at Ballygunge where alternating current house supply is installed.

An Amsler Standardising Box for the periodic calibration of the 100-ton Buckton Testing Machine was received during the year provided with a National Physical Laboratory Certificate showing results of tests upon it carried out on the 100-ton Buckton Testing Machine at that Laboratory. A definite correlation is now established, therefore, between the machines at the two establishments.

The want of such a standard and correlation has been repeatedly felt in the past owing to cases arising in which the accuracy of test-results, particularly in connection with imported structural steels for Railway bridge-work to B. S. S. standards, has been questioned by the firms concerned.

The installation of a 250-volt 80 ampere-hour storage battery, charging board and laboratory plug-board, with the necessary building construction and wiring, was put in hand towards the end of the year. The work is now nearing completion.

Chemical Section.

60. The work of the Chemical section has shown a considerable increase in several branches as compared with the tests carried out in 1924-25. This is shown by the following table of samples tested in the two years respectively :—

	1924-25.	1925-26.
Creosote oils and coal-tar products ..	248	327
Metal and alloys	81	102
Coals	353	418

On the other hand the number of samples of paints tested shows an apparent decrease of from 794 in 1924-25 to 409 in 1925-26, due mainly to the fact that samples in connection with the Departments' annual contracts for 1925-26 were dealt with prior to the end of 1924-25, whereas the samples in connection with similar contracts for 1926-27 were received somewhat later on this occasion. These are still being dealt with and will go to increase the total for the ensuing year.

Until the end of the year under review the section was responsible for the inspection, sampling and testing of supplies of creosote oils made to the North-Western Railway. From April 1st, 1926, the inspection and sampling has been transferred to the office of the Controller of Inspection, Calcutta.

The number of coal samples tested was considerably augmented by the work undertaken for the Coal Grading Board, and up to the 31st March 1926 105 samples were received from the Board through the Chief Mining Engineer, Railway Board.

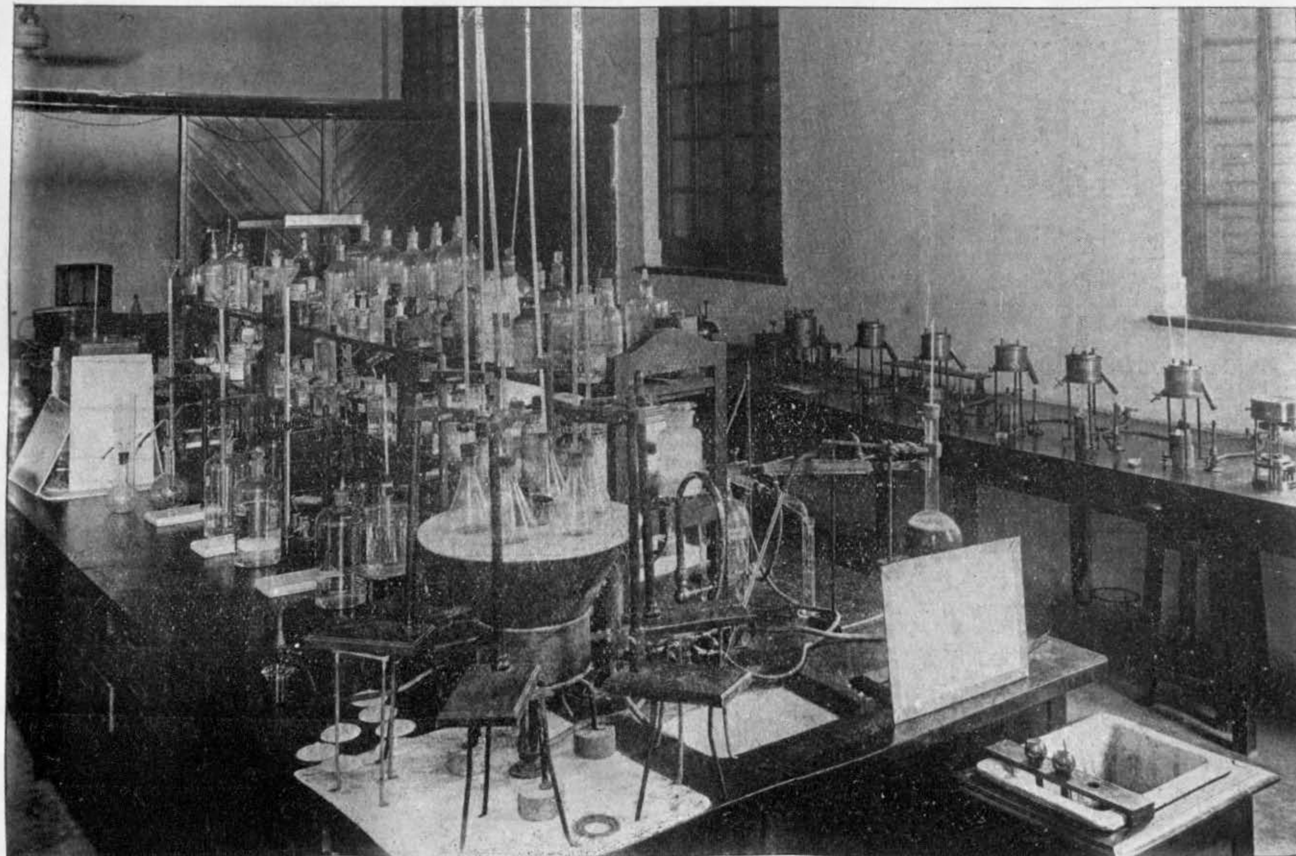
Investigation of the weathering and protective properties and composition of various paints and allied substances on the market and also of experimental paints made up in the laboratory has been continued and an *ad interim* report was recently issued.

Valuable information has been obtained already as a result of this work but it is necessary to continue and extend the work in a more searching manner and to this end certain of the staff has been set apart specially for it.

Oil Section.

61. The work of the Oil Laboratory comprised the testing of 1856 samples during the year under review against 1668 samples in 1924-25.

A special series of investigations has been commenced in connection with the scheme for a complete examination of samples of lubricating oils submitted by the representatives of the various oil companies. Standard samples were called for against a selection of Indian Stores Department and other specifications and up to the present 213 samples from 12 companies have been received. Complete examination of their physical and chemical properties is being carried out so as more completely to determine their suitablilities for the uses for which they are required than has so far been possible.



PORTION OF OIL TESTING LABORATORY, GOVERNMENT TEST HOUSE, ALIPORE, CALCUTTA.

62. Another example of the employment of the staff of the Department for purposes not included within its functions is the selection of the Superintendent of the Government Test House to act, in his official capacity, as a member of the Sub-Committees appointed during the year by the Indian Committee of the British Engineering Standards Association for the consideration of draft specifications of that Association for electrical indicating instruments, concrete switch-gear cells and cubicles, and paint materials and paints.

63. A complete list of the apparatus installed at the Test House will be found in appendix XIII, and the details of articles of various descriptions tested are given in appendix XIV. A reproduction of a photograph taken of a portion of the oil testing laboratory faces this page.

CHAPTER VI.

Encouragement of Indian industries and local purchases.

64. The exploration of the indigenous sources of supply resulted during the year in the addition of 625 firms to the list of firms prescribed in Rules 3 (*b*), 3 (*c*) and 10 of the Stores Purchase Rules and to the general list of "Approved Contractors" to the Department. The following table indicates the total number of firms registered up to the end of the year, distributed amongst the various Provinces and classified according to the different descriptions of stores dealt with by them.

—	Bengal.	Bombay Presidency. Bombay.	Bombay Presidency. Karachi.	Madras.	Punjab.	United Provinces.	Delhi.	Burma.	Bihar and Orissa.	Central Provinces.	Indian States.	Total.
Railway materials ..	59	39	4	9	6	4	6	5	5	..	1	138
Hardware.. ..	68	50	14	12	11	16	9	9	3	..	5	197
Implements and tools	48	39	10	13	12	5	10	9	3	1	2	152
Metals	82	45	10	13	11	8	9	10	4	1	1	194
Mechanical equipment.	140	120	12	29	19	12	17	24	3	..	4	380
Electrical equipment	90	55	14	22	15	13	14	9	3	..	3	238
Oils	36	28	5	10	4	6	3	8	..	..	4	104
Paints, colours, enamels and varnishes.	41	35	7	9	4	2	1	4	1	..	1	105
Chemicals (excluding medicines and drugs).	34	15	2	3	2	4	2	3	..	..	1	66
Textiles :—												
(a) Cotton materials.	58	64	3	5	25	15	9	5	..	1	2	187
(b) Woollen materials.	18	17	1	2	7	6	1	2	1	..	2	57
(c) Jute, flax and hemp materials.	50	22	4	1	8	4	..	3	..	1	..	93
Leather goods ..	10	6	..	..	4	1	..	3	..	..	..	24
Structural engineering.	34	15	3	6	2	4	2	7	2	..	..	75
Miscellaneous stores	127	81	15	20	32	20	13	14	3	6	5	336
Medical, surgical and scientific stores and equipment (excluding medicines, chemicals and drugs).	10	3	..	1	1	2	..	..	..	..	..	17
Wireless stores ..	1	1	..	..	..	..	..	1	..	..	..	3
Mathematical drawing and surveying instruments and equipment.	5	6	..	..	..	..	1	1	..	..	..	13
Total ..	911	641	104	155	163	122	97	117	28	10	31	2,379

In addition to these, 95 firms were registered for small orders on the lists maintained by the subordinate purchasing agencies of the Department. Of these 56 are located in Bombay, 29 in Calcutta, 7 in Madras and 3 in Karachi. Enrolment on these lists is sought after by firms established in the country. This is particularly evident in the case of those firms which are not eligible for inclusion in any of the three lists prescribed in the Stores Rules. Applications were received from 551 such firms during the year. Of these 220 were registered and 223 rejected as being unsuitable, the cases of the others having remained unsettled by the close of the year. The registration of firms is not, as indicated in the previous year's Report, a mere formality. Only such firms are admitted to the list whose capacity, standing, general suitability and ability to deal satisfactorily with orders placed by the Department are established after a detailed investigation by the Department's staff. The names of 8 firms were removed from the list during the year, as it was found that they could not safely be entrusted with the efficient carrying out of contracts let to them. The lists prescribed in the Stores Rules have been published in the Gazette of India, Part II, and in the Indian Trade Journal.

65. Advantage was taken of every opportunity that offered, to advise and instruct manufacturers in India in the matter of the improvement of their products. Particulars of some of the work which was done in this connection will be found in paragraphs 58 to 61 *ante* which contain mention of some of the more important testing work carried out at the Government Test House at Alipore. Other instances of the same nature were connected with the following classes of stores:—

Acetate of lime.

Asbestos fibre for packing.

Black paint.

Brushes of various kinds.

Enamelled ware.

Glass jars for leclanche battery cells.

Glass jars for preserves.

Handcuffs.

Insulators.

"Ignus" stoves.

"Latex" crepe rubber pads.

Leather belting and link leather belting

Locks.

Malleable cast iron.

Methyl alcohol.

Pig iron.

APPENDIX I.

ORGANIZATION

OF

The Indian Stores Department as it stood on the 31st March 1926.

CHIEF CONTROLLER OF STORES.

- **PURCHASE AND INTELLIGENCE.**
  - Director of Purchase and Intelligence.
    - Textiles and Leather.
      - Deputy Director of Purchase.
      - Assistant Director of Purchase.
    - Intelligence.
      - Assistant Director of Intelligence.
    - Engineering.
      - Deputy Director of Purchase.
      - Assistant Director of Purchase.
    - Hardware and Miscellaneous.
      - *Deputy Director of Purchase.*
- **DIRECTION.**
  - Assistant Chief Controller.
- **INSPECTION.**
  - Director of Inspection.
    - Assistant Director of Inspection.
    - *Assistant Director of Inspection.*
    - Head Draftsman.
    - 4 Draftsmen.
    - 2 Tracers.
    - Ferrotyper.
- **Leave Reserve.**
  - *Assistant Controller of Purchase.*
  - *4 Inspectors of Stores.*
  - *2 Examiners of Stores.*
  - *2 Chemical Assistants.*
  - *Physical Assistant.*

Common establishment (below Purchase and Intelligence, Direction and Inspection):

Chief Superintendent.
4 Superintendents.
1 Superintendent.
31 Assistants.
4 Assistants.
55 Clerks.
11 Clerks.
6 Stenographers.
7 Duftries.
2 Duftries.
Jamadar.
27 Peons.
2 Peons.
3 Farashes.

Provincial. (Purchase)

- **Calcutta.**
  - Controller of Purchase.
  - Asst. Controller of Purchase.
  - Head Clerk.
  - Stenographer.
  - 8 Clerks.
  - *8 Clerks.*
  - Duftry.
  - 3 Peons.
  - *3 Peons.*
- **Bombay.**
  - Asst. Controller of Purchase.
  - *Asst. Controller of Purchase (Junior).*
  - Head Clerk.
  - Stenographer.
  - 6 Clerks
  - *4 Clerks.*
  - Duftry.
  - 3 Peons.
  - *2 Peons.*
  - Chowkidar.
- **Karachi.**
  - *Controller of Purchase.*
  - *Head Clerk.*
  - *Stenographer.*
  - *4 Clerks.*
  - *Duftry.*
  - *3 Peons.*
  - *Chowkidar.*

Provincial. (Inspection)

- **Calcutta Circle of Inspection.**
  - Controller of Inspection.
  - Assistant Controller of Inspection.
  - 9 Inspectors of Stores.
  - 8 Examiners of Stores.
  - *2 Examiners of Stores.*
  - Head Clerk.
  - Stenographer.
  - 17 Clerks.
  - *9 Clerks.*
  - Draftsman.
  - Tracer.
  - Duftry.
  - 10 Peons.
  - 2 Chowkidars.
- **Government Test House.**
  - Superintendent, Government Test House.
    - Physicist.
      - Assistant Engineer.
      - 5 Physical Assistants.
      - *2 Physical Assistants.*
      - Foreman.
    - Chemist.
      - Assistant Chemist.
      - 13 Chemical Assistants.
      - *2 Chemical Assistants.*
    - Head Clerk.
    - Stenographer.
    - Accountant.
    - 9 Clerks.
    - *Clerk.*
    - Storekeeper.
    - *Cement Laboratory Operator.*
    - 2 Mistries.
    - *2 Mistries.*
    - Fitter.
    - 9 Laboratory bearers.
    - *Laboratory bearer.*
    - 7 Laboratory khalasis.
    - *4 Laboratory khalasis.*
    - Duftry.
    - 8 Peons.
    - Office bearer.
    - Chowkidar.
    - Mali.
- **Metallurgical Inspectorate.**
  - Metallurgical Inspector.
    - 2 Senior Assistant Metallurgical Inspectors.
    - 2 Assistant Metallurgical Inspectors.
    - Physical.
      - 2 Inspectors.
      - *Inspector.*
      - 5 Examiners.
      - *Examiner.*
    - Chemical.
      - Chemist.
      - 4 Chemical Assistants.
      - *2 Chemical Assistants.*
    - Head Clerk.
    - Accountant.
    - 7 Clerks.
    - *Clerk.*
    - 3 Laboratory bearers.
    - *Laboratory bearer.*
    - 7 Peons.
    - *Peon.*
    - *6 Technical Assistants.* } For Bounty work.
    - *Clerk* }
- **Madras Inspection Branch.**
  - Inspector-in-Charge.
    - Examiner.
    - *Examiner.*
    - 3 Clerks.
    - *Clerk.*
    - Duftry.
    - 2 Peons.
- **Bombay Inspection Circle.**
  - Assistant Controller of Inspection.
    - 2 Inspectors.
    - *2 Inspectors.*
    - 2 Examiners.
    - *3 Examiners.*
    - Head Clerk.
    - Stenographer.
    - 7 Clerks.
    - *8 Clerks.*
    - Duftry.
    - 2 Peons.
    - *4 Peons.*
    - Chowkidar.
- **Cawnpore Circle.**
  - Cawnpore Circle excluding the Karachi Agency.
    - Assistant Controller of Inspection.
    - Inspector of Stores.
    - *2 Inspectors of Stores.*
    - Examiner of Stores.
    - *2 Examiners of Stores.*
    - Head Clerk.
    - Stenographer.
    - 3 Clerks.
    - *2 Clerks.*
    - Duftry.
    - 3 Peons.
    - *Peon.*
    - Chowkidar.
  - Karachi Agency.
    - Inspector-in-Charge.
    - *Inspector of Stores.*
    - Examiner of Stores.
    - *Examiner of Stores*
    - Head Clerk.
    - 3 Clerks.
    - *2 Clerks.*
    - 2 Peons.

The appointments added during the year are shown in italics.

70. It will be observed that there has been a rapid growth, on both sides of the account. The revenue of the Department still remains below the expenditure but this is only to be expected during the process of the organisation of a new Department, and the disparity may be expected to be lessened as time goes on. An indication of this eventuality is afforded by a comparison of the statistics of the year under report with those of the previous year. The revenue increased by Rs. 3½ lakhs approximately, whereas the expenditure, excluding that involved by the carrying out of the large building scheme at Jamshedpur to which reference has been made, increased by approximately Rs. 2 lakhs only. As equipped at present, the Department is in many respects in a position to undertake a larger volume of work than has so far been entrusted to it, and its more extensive utilization by other purchasing authorities must have the effect of enabling it to be more self-supporting than it is at present. As has been mentioned, there are indications which point to more extensive resort to its services by consumers, and it is hoped that the record of the ensuing year will show an improvement in its financial position.

J. S. PITKEATHLY,

Chief Controller of Stores,
Indian Stores Department.

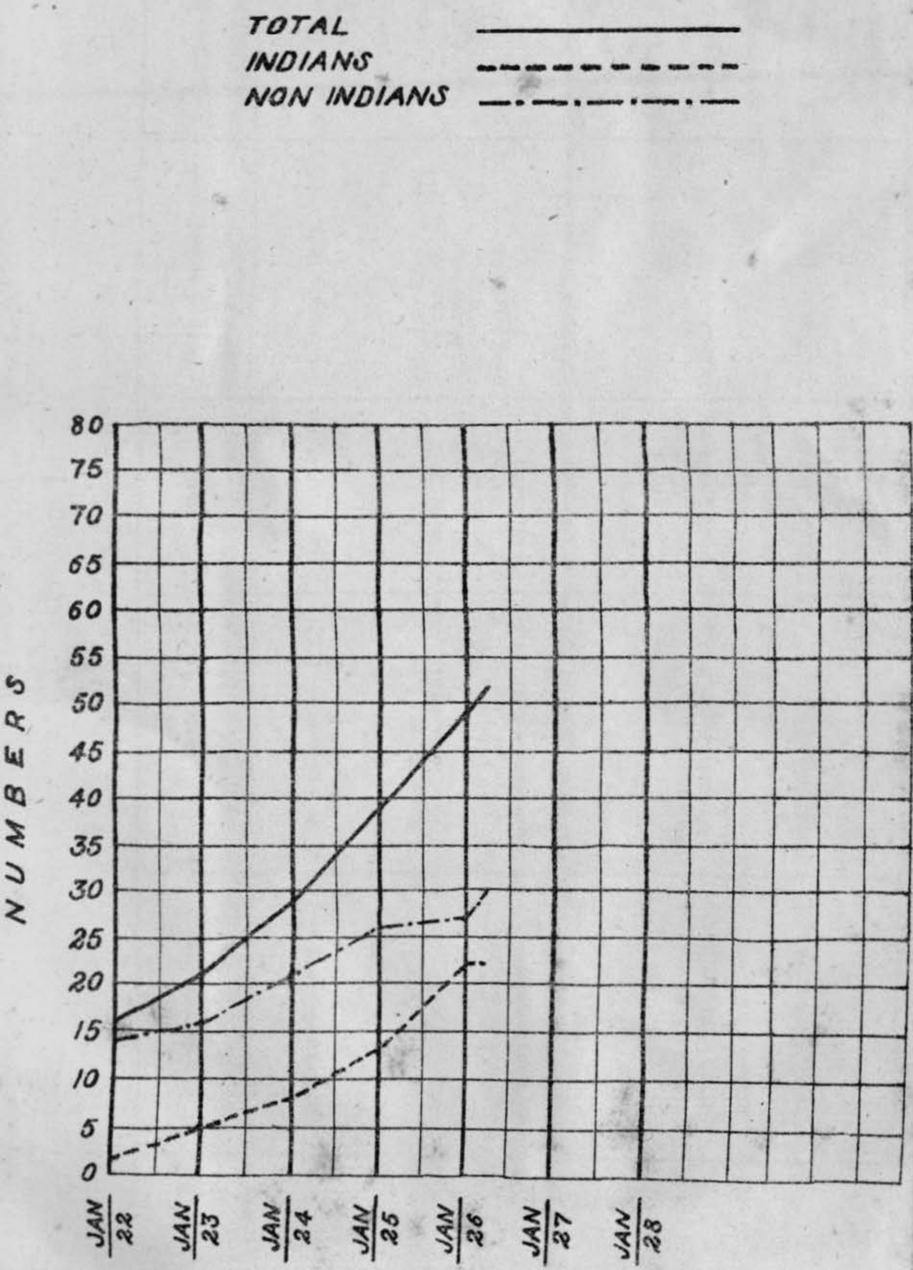
SIMLA,

Dated the 5th July 1926.

L21ISD—450—23-7-26—GIPS

APPENDIX II

INDIAN STORES DEPARTMENT
GAZETTED STAFF
UP TO 31-3-26



APPENDIX III.

Gazetted Staff of the Indian Stores Department.

S. No.	Designation.	Name.	Pay.	Date of appointment.	Remarks.
			Rs.		HEADQUARTERS.
1	Chief Controller of Stores..	J. S. Pitkeathly, C.I.E., C.V.O., C.B.E., D.S.O.	3,000—100—3,500	1st January 1922 ..	Was on leave from the 29th June 1925 to the 26th April 1926. Mr. T. Ryan officiated in the post from the 14th July 1925 to the 3rd March 1926 and Lieutenant-Colonel K. M. Kirkhope from the 4th March 1926 to the 26th April 1926.
		T. Ryan, C.I.E. ..		14th July 1925 to 3rd March 1926.	
2	Director of Inspection	Lieutenant-Colonel K. M. Kirkhope, C.I.E., V.D., M.I.C.E., M.I.E. (I.).	2,250—100—2,750 +£13-6-8 (Personal).	23rd May 1923.	Mr. H. F. Davy, Controller of Inspection, Calcutta Circle, officiated in the post from the 4th March 1926 to the 26th April 1926, *vice* Lieutenant-Colonel K. M. Kirkhope officiating as Chief Controller of Stores.
3	Director of Purchase and Intelligence.	Lieutenant-Colonel H. M. Alexander, D.S.O., O.B.E., I.A.	2,000—100—2,500 +£13-6-8 (Personal).	1st January 1922 ..	Mr. R. W. Targett officiating in the post from the 13th March 1926, during Lieutenant-Colonel Alexander's absence on leave.
4	Deputy Director of Purchase (Textiles).	R. W. Targett	1,500—75—1,800	1st January 1922 ..	Mr. D. Sadasivam officiating in the post from the 13th March 1926 *vice* Mr. R. W. Targett, officiating as Director of Purchase and Intelligence.

S. No.	Designation.	Name.	Pay.	Date of appointment.	Remarks.
			Rs.		
5	Deputy Director of Purchase (Engineering).	C. A. Williams ..	1,250—75—1,550 +£30 per mensem (Personal.)	15th June 1923 ..	Was on leave from the 29th May 1925 to the 2nd February 1926. Major J. Young officiated in the post from the 29th May 1925 to the 2nd February 1926 and was confirmed from the 3rd February 1926.
		Major J. Young, M.B.E., M.I.E.E.	1,500—75—1,800	29th May 1925.	
6	Deputy Director of Purchase (Engineering—Miscellaneous).	C. A. Williams ..	1,250—75—1,550 +£30 (Personal.)	3rd February 1926.	
7	Assistant Chief Controller of Stores.	R. R. Reaks, M.B.E. ..	1,000—50—1,250	26th February 1922 ..	Mr. Kirpa Ram, Chief Superintendent, officiated in the post while Mr. Reaks officiated as Controller of Purchase, Calcutta Circle, from the 27th August 1925 to the 26th September 1925 and also while he was on leave from the 18th March to the 17th April 1926.
		Kirpa Ram, B.A. ..		24th August 1925 to 2nd October 1925 and 18th March 1926 to 17th April 1926.	
8	Assistant Director of Inspection.	A. G. Khan, B.A., M.Sc., (Tech.) A.M.I.E.E., M.I.E. (I.)	950—50—1,200 .. Spl. pay Rs. 100.	18th June 1923.	Held the second appointment of Assistant Director of Inspection, in addition to his own duties from 1st August 1925 to the 27th December 1925.
9	Assistant Director of Inspection.	R. G. Burt	950—50—1,200 .. Spl. pay Rs. 100.	28th December 1925 ..	Appointed as officiating Assistant Controller of Inspection, Calcutta Circle, from the 4th March 1926. Mr. D. N. Chaterjee, Inspector of Stores, appointed against this post as Inspector of Stores from that date.

10	Assistant Director of Purchase (Engineering).	Major J. Young, M.B.E., M.I.E.E.	1,000—50—1,200	16th September 1924 to 28th May 1925.	Appointed as Deputy Director of Purchase (Eng.) from the 29th May 1925.
		Kanwar Har Partap Singh	1,000—50—1,200	29th May 1925 to 28th November 1925.	Resigned from 28th November 1925 afternoon.
		G. T. Thadhani	500—50—1,000	29th November 1925 ..	Appointed as Assistant Controller of Purchase (Junior scale) against the vacant appointment of Assistant Director of Purchase.
11	Assistant Director of Purchase (Textiles).	D. Sadasivam, B.Sc., (Tech.), A.M.C.T.	1,000—50—1,200	1st December 1922 ..	On leave from the 22nd June 1925 to the 5th August 1925 and from the 13th January 1926 to the 6th February 1926. Officiating as Deputy Director of Purchase (Textiles) from the 13th March 1926.
12	Assistant Director of Intelligence.	R. S. D'Arcy	1,000—50—1,200	8th May 1923 ..	Pay of the appointment revised with effect from the 25th June 1925.
13	Assistant Controller of Purchase.	K. C. Pakrasi	500—50—1,000 ..	14th November 1925.	
14	Inspector of Stores ..	R. K. Heysham, M.I.E.I., A.F.R.Ae.S., F.Z.S.	500—50—750 ..	9th June 1925 ..	Acted as Inspector-in-Charge, Karachi Agency, from the 2nd January 1926 to the 22nd February 1926.
	OFFICE OF THE CONTROLLER OF PURCHASE, CALCUTTA CIRCLE.				
15	Controller of Purchase ..	P. J. Gahan, M.B.E. ..	1,500—75—1,800	12th May 1924 ..	Mr. R. R. Reaks, Assistant Chief Controller of Stores, officiated in the post from the 27th August 1925 to the 26th September 1925 during the absence of Mr. Gahan on leave.
16	Assistant Controller of Purchase.	K. C. Sen — ..	500—50—1,000	24th January 1925 ..	

S. No	Designation.	Name.	Pay.	Date of appointment.	Remarks.
	OFFICE OF THE ASSISTANT CONTROLLER OF PURCHASE, BOMBAY CIRCLE.				
17	Assistant Controller of Purchase.	K. K. Bose, B.Sc., Assoc., A.S.M.E.	1,000—50—1,200	12th July 1924.	
18	Assistant Controller of Purchase (Junior).	D. W. Lewis	500—50—1,000 ..	13th October 1925.	
	OFFICE OF THE CONTROLLER OF PURCHASE, KARACHI AGENCY.				
19	Controller of Purchase ..	J. Stephens	1,000—50—1,200	28th September 1925.	
	OFFICE OF THE METALLURGICAL INSPECTOR, JAMSHEDPUR.				
20	Metallurgical Inspector ..	E. A. Wraight, A.R.S.M., M.I.M.M., F.I.C.	2,250—100—2,750	27th February 1925.	
21	Senior Assistant Metallurgical Inspector.	N. Garrett-Smith ..	950—50—1,200 ..	18th December 1919 ..	Proceeded on leave preparatory to retirement from the 31st March 1926 and Mr. R. C. Arbery appointed to the post from that date.
		R. C. Arbery		31st March 1926 ..	
22	Senior Assistant Metallurgical Inspector.	R. C. Arbery	950—50—1,200 ..	11th February 1925 to 30th March 1926.	
		P. Hinde, B., Met. (Sheffield).	950—50—1,200 ..	31st March 1926.	
23	Assistant Metallurgical Inspector.	R. C. Arbery	350—30—590* ..	1st March 1916 ..	Holding temporary post of Senior Assistant Metallurgical Inspector, from the 11th February 1925 to the 30th March 1926 and transferred to the appointment held by Mr. N. G. Smith from 31st March 1926, to be confirmed on the latter's retirement.
		N. N. Sen, A.R.S.M., M.Sc., A.I.C.	500—50—750 ..	19th October 1925.	

*Plus a sharee of fees.

24	Assistant Metallurgical Inspector.	P. Hinde, B., Met. (Sheffield)	500—50—750 ..	14th November 1921 to 30th March 1926.	Was on leave from the 7th April 1925 to the 6th December 1925. Appointed as Senior Assistant Metallurgical Inspector from 31st March 1926.
25	Inspector of Stores (Metallurgical).	Dr. R. N. Chowdhury, Ph. D. (London), M.Sc.	500—50—750 ..	13th October 1924.	
26	Do. ..	Prem Singh Sharma, A.M.I.M.E.	500—50—750 ..	22nd April 1922.	
27	Chemist	B. C. Mukerji, M.Sc., F. C. S.	350—25—650 ..	8th August 1921.	

OFFICE OF THE SUPERINTENDENT, GOVERNMENT TEST HOUSE.

28	Superintendent, Government Test House.	H. A. F. Musgrave ..	1,250—100—1,750	5th May 1910 to 16th August 1925.	Proceeded on leave preparatory to retirement from the 7th May 1925 and retired from the 17th August 1925. Mr. Brodie officiated in the post from the 7th May 1925 and confirmed from the 17th August 1925.
—	—	N. Brodie, M. Sc., F.C.S., A.I.C.		7th May 1925 ..	Proceeded on leave from the 26th March 1926 and Mr. Gilmore appointed as officiating Superintendent, Government Test House.
29	Chemist	N. Brodie, M.Sc., F.C.S., A.I.C.	950—50—1,200	27th December 1913 to 23rd August 1925.	Appointed as Superintendent, Government Test House, from the 7th May 1925. Held charge of the appointment of Chemist in addition up to the 23rd August 1925.
..		N. N. Sen Gupta, M. Sc. ..		24th August 1925 ..	(On probation).

S. No.	Designation.	Name.	Pay.	Date of appointment.	Remarks.
30	Physicist	E. F. G. Gilmore ..	950—50—1,200 ..	12th February 1924 ..	Officiating as Superintendent, Government Test House, from the 26th March 1926, in addition to his own duties.
31	Assistant Chemist ..	N. N. Sen Gupta, M. Sc. ..	750—50—900 ..	16th February 1925 ..	Appointed as Chemist on probation from the 24th August 1925.
..	..	K. C. Pakrasi		3rd October 1925 to 27th October 1925.	Appointed as Assistant Controller of Purchase from the 14th November 1925.
..	..	P. K. Sen		28th October 1925.	
32	Assistant Engineer ..	A. N. Choudhuri ..	500—50—750 ..	1st September 1923 ..	Was on leave from the 4th June 1925 to the 30th July 1925.
		OFFICE OF THE CONTROLLER OF INSPECTION, CALCUTTA CIRCLE.			
33	Controller of Inspection ..	H. F. Davy, A.M.I.C.E., A.M.I.E. (Ind.).	1,250—100—1,750	1st May 1923 ..	Mr. A. V. Humby officiated in the post from the 20th April 1925 to the 6th December 1925, during the absence of Mr. H. F. Davy on leave, and again from the 27th February 1926, on the latter's appointment as officiating Director of Inspection.

34	Assistant Controller of Inspection.	A. V. Humby	950—50—1,200	4th January 1925 ..	Officiated as Controller of Inspection from the 20th April 1925 to the 6th December 1925 and again from the 27th February 1926 *vice* Mr. H. F. Davy, Mr. R. G. Burt appointed as Assistant Controller of Inspection, *vice* Mr. A. V. Humby.
35	Inspector of Stores ..	T. H. Radford	500—50—750	15th October 1921 ..	
36	Do. ..	E. H. G. Barefoot ..	500—50—750	2nd April 1922 to 14th November 1925.	Proceeded on leave from the 7th April 1925 and retired from the 15th November 1925.
		G. E. Hale.		2nd April 1925.	
37	Do.	H. Lewin	500—50—750	21st April 1922 to 18th October 1925.	Proceeded on leave from the 21st April 1925 and retired from the 19th October 1925.
		Walker		21st April 1925 to 11th July 1925.	
		Rogers		10th July 1925.	
38	Do.	D. N. Chatterjee ..	500—50—750	7th April 1924 ..	Transferred to Headquarters from the 2nd March 1926 (joined on the 4th March 1926).
39	Inspector of Stores ..	D. R. Millar	500—50—750	14th September 1923 to 27th December 1925.	Discharged from the 28th December 1925.
	..	J. B. Glass		23rd March 1926.	
40	..	R. G. Burt	500—50—750	21st April 1924 to 27th December 1925.	Officiated as Assistant Controller of Inspection from the 20th April 1925 to the 6th December 1925 and appointed as Assistant Director of Inspection from the 28th December 1925. Again appointed as officiating Assistant Controller of Inspection Calcutta Circle, from the 4th March 1926.
	..	R. K. Khosla		1st December 1925.	
41	Inspector of Stores ..	C. S. Sarkar	500—50—750	9th February 1925	
42	Do. ..	E. Ellison	500—50—750	9th February 1925.	
43	Do.	E. Pugh	500—50—750	9th February 1925 to 1st April 1925.	

S. No.	Designation.	Name.	Pay.	Date of appointment.	Remarks.
			Rs.		
	Inspector of Stores ..	O. J. Lee Jones	500—50—750	2nd April 1925.	
44	Do.	K. V. Appaya	Do.	30th July 1925.	
	OFFICE OF THE ASSISTANT CONTROLLER OF INSPECTION, BOMBAY CIRCLE.				
45	Assistant Controller of Inspection.	Major F. C. Carlton Scott..	950—50—1,200	8th September 1924.	
46	Inspector of Stores ..	B. N. Dutt, B.Sc., Tech., (Manch.). ..	500—50—750	26th August 1924.	
47	Inspector of Stores ...	Captain W. R. Carlton ..	500—50—750	23rd October 1924 to 18th February 1926.	Appointed as Inspector-in-Charge Karachi Agency, from the 23rd February 1926.
		G. S. Anderson		26th March 1926.	
48	Do. ...	A. H. Roberts	Do.	30th January 1926.	
	OFFICE OF THE ASSISTANT CONTROLLER OF INSPECTION, CAWNPORE CIRCLE.				
49	Assistant Controller of Inspection.	J. Cumming, A. M. I. Mec. E.	950—50—1,200	7th November 1924.	
50	Inspector of Stores ..	S. D. Oke, B.Sc. (Tech.) (Manch.).	500—50—750	17th September 1924.	

		KARACHI INSPECTION AGENCY.			
51	Inspector-in-Charge ..	J. Stephens	500—50—750 Special pay Rs. 150.	14th January 1924 ..	Appointed as Controller of Purchase from the 28th September 1925. Held charge of the Inspection Agency in addition up to the 1st January 1926.
"	"	R. K. Heysham, M.I.E.I., A F.R.Ae.S., F.Z.S.		2nd January 1926 to 22nd February 1926.	
	"	Captain W. R. Carlton ..		23rd February 1926.	
		MADRAS INSPECTION BRANCH.			
52	Inspector-in-Charge ..	H. Sakharam Rau, B.A., B.Sc., Tech. (Manch.).	500—50—750 Special pay Rs. 150.	14th July 1924.	

APPENDIX IV.

Statement showing the value (in thousands of rupees) of stores purchased on behalf of various organisations utilising the services of the Indian Stores Department during the year 1925-26, and three preceding years.

Serial No.	Organisation.	Textiles and leather.				Engineering and Miscellaneous stores.	Total for the year 1925-26.	Total for the year 1924-25.	Total for the year 1923-24.	Total for the year 1922-23.
		Cotton.	Woollen.	Jute and hemp, etc.	Leather.					
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	CENTRAL.									
	ARMY.									
1	Quartermaster General in India (including Military Transport).	2,125	2,889	1,049	..	89	6,152	6,187	10,223	14,551
2	Master General of Supply	994	426	125	..	171	1,716	2,661	341	388
3	Military Engineering Services ..	20	1	20	3	3,812	3,856	3,231	1,033	..
4	Royal Indian Marine Dockyard, Bombay.	(a)	(a)	9	..	18	27	27	..	..
5	Military Secretary's Branch ..	..	..	..	..	1	1	..	..	..
6	General Staff Branch	..	..	..	..	(a)	(a)	..	..	..
7	Establishment Officer, Army Headquarters.	..	..	..	..	(a)	(a)	..	..	..
8	Duke of York's Own Skinner's Horse	16	..	..	..	..	16	..	..	..
	Total Army Department ..	3,155	3,316	1,203	3	4,091	11,768	12,106	11,597	14,939

	CIVIL (INCLUDING MINOR ADMINISTRATIONS).									
9	Government of India Secretariat and Attached Offices.	23	28	..	..	8	59	24	12	..
10	Superintendent, Viceregal Estates ..	..	..	..	..	..	..	6	..	..
11	Public Works Department, Simla Imperial Circle.	3	..	..	..	14	17	27	..	..
12	Director-General, Indian Medical Service.	290	2	..	..	(a)	292	89	..	..
13	Posts and Telegraphs	265	39	309	(a)	344	957	874	353	295
14	Northern India Salt Revenue ..	11	5	212	..	206	434	1,109	44	1,115
15	Printing, Stationery and Stamps ..	23	..	24	..	14	61	184	8	3
16	Security Printing Department ..	(a)	..	..	..	7	7	(a)	..	..
17	Archaeological Department ..	..	..	..	..	1	1	..	..	..
18	Survey of India	8	..	..	..	..	8	3	33	26
19	Geological Survey	..	..	..	..	(a)	(a)	(a)	..	..
20	Forest Research Institute, Dehra Dun	..	..	2	..	17	19	4	(a)	..
21	X Ray Institute, Dehra Dun ..	..	..	..	..	..	..	(a)	..	..
22	Agricultural Research Institute, Pusa	(a)	..	..	..	17	17	(a)	..	..
23	Veterinary Research Institute, Muktesar.	1	4	..	..	..	5	..	..	..
24	Bacteriologist, Muktesar	..	..	..	..	..	..	5	..	..
	Carried over ..	624	78	547	..	628	1,877	2,325	450	1,439

Serial No.	Organisation.	Textiles and leather.				Engineering and Miscellaneous stores.	Total for the year 1925-26.	Total for the year 1924-25.	Total for the year 1923-24.	Total for the year 1922-23.
		Cotton.	Woollen.	Jute and hemp etc.	Leather.					
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	Brought forward ..	624	78	547	..	628	1,877	2,325	450	1,439
	CIVIL DEPARTMENTS—*contd.*									
25	Collector of Customs, Bombay ..	(*a*)	3	..	..	(*a*)	3	10	..	..
26	Collector of Customs, Bengal ..	1	..	..	..	..	1	..	..	..
27	Collector of Customs, Karachi ..	..	..	..	..	6	6	..	..	..
28	Collector of Customs, Burma ..	..	..	..	..	..	..	15	3	..
29	Income Tax Department ..	(*a*)	1	..	..	(*a*)	1	1	..	..
30	Accounts Department	(*a*)	1	(*a*)	..	(*a*)	1	(*a*)	(*a*)	..
31	Currency Department	..	(*a*)	..	..	..	(*a*)	..	..	..
32	His Majesty's Mint, Bombay ..	..	..	..	..	3	3	..	..	..
33	His Majesty's Mint, Calcutta ..	..	..	..	..	(*a*)	(*a*)	..	..	..
34	Opium Department	(*a*)	4	13	..	43	60	49	..	..
35	Mining Department	..	..	..	..	..	..	(*a*)	..	..

36	Royal Botanical Gardens ..	..	..	..	..	4	4	(a)	..	..
37	Meteorological Department ..	(a)	(a)	..	..	(a)	(a)	..	..	..
38	Indian Central Cotton Committee ..	..	..	1	..	17	18	..	..	..
39	North West Frontier Province, Police Department.	63	45	..	1	..	109	52	61	16
40	North West Frontier Province, Jail Department.	..	..	..	..	..	..	..	(a)	..
41	Chief Commissioner, Delhi ..	..	1	..	..	..	1	..	..	..
42	Delhi (Public Works Department) ..	..	86	..	..	297	383	565	869	..
43	Imperial Works Division, Dehra Dun	..	..	..	..	11	11	..	..	..
44	Chief Commissioner, Coorg ..	(a)	..	(a)	..	3	3	20	..	..
45	Andamans Commission	4	(a)	11	..	109	124	16	..	..
46	Rajputana Agency	..	..	..	..	9	9	21	..	..
47	Baluchistan Agency	..	..	..	..	2	2	(a)	..	..
48	Persian Gulf Agency	..	..	..	..	..	..	15	..	..
49	Political Agent, Central, Province Feudatory States.	..	..	..	..	(a)	(a)	(a)	..	..
50	Agent to Governor-General, Central India, Indore.	..	..	..	..	1	1	..	..	..
51	His Britannic Majesty's Consul for Sistan, etc.	..	..	..	..	(a)	(a)	..	..	..
52	British Envoy at the Court of Nepal	..	..	..	..	(a)	(a)	..	..	..
	Total Civil Departments (Central)	692	219	572	1	1,133	2,617	3,089	1,383	1,455

Serial No.	Organisation.	Textiles and leather.				Engineering and Miscellaneous stores.	Total for the year 1925-26.	Total for the year 1924-25.	Total for the year 1923-24.	Total for the year 1922-23.
		Cotton.	Woollen.	Jute and hemp, etc.	Leather.					
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	RAILWAYS.									
53	North Western Railway	437	202	69	..	869	1,577	1,367	892	17
54	Eastern Bengal Railway	9	..	..	..	4	13	69	..	..
55	East Indian Railway (including Oudh and Rohilkhand Railway).	577	..	20	(a)	1,020	1,617	2,974	45	21
56	Great Indian Peninsula Railway ..	84	10	23	..	4	121	176	..	..
57	Central Indian Coalfields Railway Survey.	..	..	..	..	..	..	..	..	..
58	Assam Bengal Railway	21	..	16	..	40	77	47	..	..
59	Bombay, Baroda and Central India Railway.	..	..	..	..	3	3	..	..	..
60	South Indian Railway	..	..	..	..	1	1	..	..	..
61	Bengal Nagpur Railway	..	..	..	..	730	730	..	..	..
62	H. E. H. the Nizam's Guaranteed State Railways.	..	..	..	..	1	1	10	..	..
63	Burma Railways	67	..	..	..	..	67	..	..	..
	Total Railways ..	1,195	212	128	..	2,672	4,207	4,643	938	38

PROVINCIAL.

	Madras.									
64	Public Works Department ..	..	..	..	..	9	9	(a)	..	(a)
65	Printing Department	(a)	..	..	..	2	2	..	..	—4
66	Police Department	(a)	..	..	..	(a)	(a)	..	..	..
67	Jail Department	..	..	..	..	1	1	..	..	..
68	Education Department	..	..	..	..	(a)	(a)	..	..	..
69	Medical Department	..	..	..	..	(a)	(a)	..	..	..
	Bombay.									
70	Public Works Department (Lloyd Barrage Project)	41	..	(a)	(a)	3,736	3,777	2,630	658	..
71	Development Department ..	..	..	..	..	(a)	(a)	..	77	..
72	Public Works Department ..	8	..	1	..	156	165	111	..	..
73	Printing and Stationery Department			1	..	6	19	9	4	..
74	Police Department	23	21	..	17	..	61	22	21	..
75	Jail Department	133	32	(a)	..	1	166	107	..	..
76	Medical Department	..	..	..	..	(a)	(a)	2	..	..
77	Sanitary Department	..	..	..	..	16	16	..	..	..
78	Agricultural Department	..	..	..	..	13	13	..	..	..
79	Forest Department	..	..	..	..	32	32	..	..	..
80	Revenue Department	1	..	..	..	(a)	1	..	..	..
	Carried over ..	218	53	2	17	3.972	4.262	2,881	760	—4

Serial No.	Organisation.	Textiles and leather.				Engineering and Miscellaneous stores.	Total for the year 1925-26.	Total for the year 1924-25.	Total for the year 1923-24.	Total for the year 1922-23.
		Cotton.	Woollen.	Jute and hemp, etc.	Leather.					
		Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	Brought forward ..	218	53	2	17	3,972	4,262	2,881	760	—4
	PROVINCIAL—*contd.*									
	BOMBAY—*contd.*									
81	Judicial Department	..	..	..	..	(a)	(a)	..	..	..
82	Political Department	..	..	..	..	1	1	..	..	..
	BENGAL.									
83	Education Department	..	..	..	..	6	6	2	..	..
84	Public Works Department ..	..	..	..	..	1	1	..	(a)	..
85	Police Department	..	..	..	..	1	1	..	(a)	(a)
86	Forest Department	..	..	..	..	1	1	(a)	..	..
87	Jail Department	..	..	..	..	16	16	(a)	..	..
88	Judicial Department	..	..	..	..	(a)	(a)	..	..	..
89	Revenue Department	..	..	..	..	..	..	(a)	..	..
90	Superintendent, Governor's Estates	..	..	..	..	1	1	..	..	..
91	Military Secretary to H. E. the Governor.	..	..	..	..	(a)	(a)	..	..	..

	United Provinces.									
92	Public Works Department ..	..	..	..	..	60	60	..	..	..
93	Printing Department	..	..	..	..	(a)	(a)	..	..	..
94	Medical Department	..	..	..	..	(a)	(a)	..	..	..
95	Revenue Department	..	..	..	..	(a)	(a)	..	..	..
96	Police Department	..	..	..	..	..	..	(a)	..	..
97	Judicial Department	..	..	..	..	..	..	..	(a)	..
	Punjab.									
98	Public Works Department (including Sutlej Valley Project).	7	..	35	..	1,686	1,728	1,956	1,371	41
99	Public Works Department, Hydro-Electric Branch.	..	..	..	..	58	58	..	..	..
100	Printing Department	..	..	..	..	..	..	14	..	..
101	Police Department	47	..	..	..	..	47	199	..	..
102	Jail Department	210	..	2	..	..	212	24	..	..
103	Education Department	(a)	..	(a)	..	3	3	(a)	..	..
104	Industries Department	(a)	..	..	..	20	20	14	49	..
105	Agricultural Department ..	1	..	1	..	19	21	33	..	..
106	Sanitary Department	..	..	..	..	(a)	(a)	22	..	..
107	Registration Department ..	..	..	..	..	(a)	(a)	..	..	..
108	Revenue Department	..	..	..	..	(a)	(a)	..	..	..
	Carried over ..	483	53	40	17	5,845	6,438	5,145	2,180	37

Serial No.	Organisation.	Textiles and leather. Cotton.	Woollen.	Jute and hemp etc.	Leather.	Engineering and Miscellaneous stores.	Total for the year 1925-26.	Total for the year 1924-25.	Total for the year 1923-24.	Total for the year 1922-23.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	Brought forward ..	483	53	40	17	5,845	6,438	5,145	2,180	37
	PROVINCIAL—*cond.*									
	PUNJAB—*contd.*									
109	Judicial Department	..	..	..	..	(*a*)	(*a*)	..	..	..
110	Finance Department	7	15	..	..	..	22	..	..	..
	BIHAR AND ORISSA.									
111	Jail Department	37	24	4	..	11	76	421	12	..
112	Printing Department	(*a*)	..	3	..	..	3	6	2	..
113	Public Works Department ..	(*a*)	..	..	..	2	2	..	(*a*)	(*a*)
114	Police Department	..	3	..	..	..	3	..	..	..
115	Medical Department	..	..	..	..	1	1	..	..	..
116	Commerce Department	..	..	..	..	..	..	..	..	2
	BURMA.									
117	Printing Department	8	..	..	..	..	8	2	..	..
118	Public Works Department ..	..	..	..	..	..	..	9	..	..
119	Police Department	207	119	35	..	..	361	195	..	..

120	Jail Department	..	..	5	..	..	5	4	3	4
	Central Provinces.									
121	Public Works Department ..	..	..	..	..	199	199	(a)	..	(a)
122	Medical Department	..	..	(a)	..	(a)	(a)	(a)	..	..
123	Jail Department	..	..	(a)	..	(a)	(a)	2	..	..
124	Revenue Department	..	..	..	..	1	1	..	..	..
125	Judicial Department	..	..	..	..	(a)	(a)	..	..	..
126	Forest Department	..	..	..	..	(a)	(a)	..	..	..
127	Excise Department	(a)	..	..	..	..	(a)	..	..	..
	Assam.									
128	Public Works Department ..	(a)	..	(a)	..	6	6	..	..	..
129	Printing Department	..	..	..	..	4	4	..	..	..
130	Education Department	..	..	..	..	..	..	(a)	..	(a)
131	Forest Department	(a)	..	..	..	(a)	(a)	(a)	..	..
132	Revenue Department	(a)	..	..	..	(a)	(a)	..	..	..
133	Jail Department	2	..	..	..	..	2	..	..	..
134	Police Department	53	28	..	..	(a)	81	..	..	..
135	Political Department	1	..	..	..	..	1	..	..	..
	Total Provincial Governments ..	798	242	87	17	6,069	7,213	5,784	2,197	43

Serial No.	Organisation.	Textiles and leather. Cotton.	Woollen.	Jute and hemp, etc.	Leather.	Engineering and Miscellaneous stores.	Total for the year 1925-26.	Total for the year 1924-25.	Total for the year 1923-24.	Total for the year 1922-23.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	INDIAN STATES.									
136	Jammu and Kashmir	21	..	..	..	..	21	20	..	..
137	Jaipur	..	..	..	..	726	726	55	..	..
138	Mysore	..	..	..	..	18	18	..	..	..
139	Indore	..	..	..	..	3	3	..	..	..
140	Rajkot	..	2	..	..	..	2	..	..	..
141	Balapur	..	..	..	..	1	1	..	..	..
..	Total Indian States ..	21	2	..	..	748	771	75	..	..
	PUBLIC BODIES.									
142	City Board, Mussoorie	(a)	..	..	..	42	42	4	..	..
143	City Board, Dehra Dun	..	..	..	..	..	..	1	..	..
144	Municipal Committee, Bannu ..	..	..	..	..	25	25	199	..	..

145	Municipal Committee, Simla ..	2	3	..	..	..	5	..	..	..
146	District Board, Muzaffarnagar ..	..	..	..	..	(a)	(a)	..	..	..
147	Port Commissioners, Calcutta ..	..	..	..	..	(a)	(a)	..	..	..
148	North-West Frontier Province Frontier Constabulary.	6	1	..	(a)	(a)	7	3	..	..
149	Trustee of English Church and Cemetery, Broach.	..	..	..	..	(a)	(a)	..	..	..
150	Fire Brigade, Peshawar	..	..	..	..	..	..	(a)	..	..
151	Red Cross	..	..	..	..	..	..	1	..	..
	Total Public Bodies ..	8	4	..	..	67	79	208	..	..
	COLONIES.									
152	South African Government ..	—	—	..	..	..	..	(a)	605	..
	Total of items below Rs. 500 marked as (a).	3	1	2	1	6	13	6	4	3
	GRAND TOTAL ..	5,872	3,996	1,992	22	14,786	26,668	25,911	16,724	16,478

APPENDIX V.

Statement showing the value of the various classes of purchases (indigenous and imported separately) during the year 1925-26, as compared with previous years.

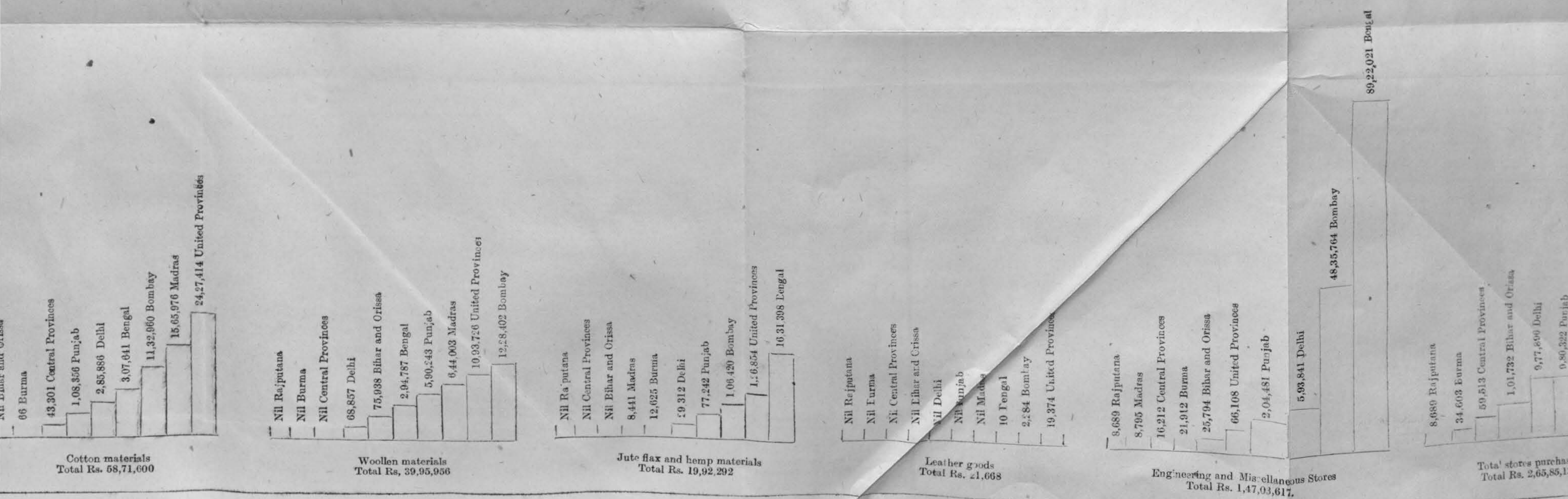
	1925-26 Rs.	1924-25 Rs.	1923-24 Rs.	1922-23 Rs.
I.—TEXTILES AND LEATHER.				
(a) Stores purchased in the Indian market—				
(i) *Cotton*—				
Indigenous	57,16,336 (97·3%)	73,08,207 (97·4%)	47,09,424 (98·6%)	66,91,242 (97·9%)
Imported	1,55,264 (2·7%)	1,93,997 (2·6%)	64,684 (1·4%)	1,45,827 (2·1%)
(ii) *Woollen*—				
Indigenous	39,49,537 (98·8%)	41,35,362 (98·7%)	41,38,441 (78·3%)	40,48,603 (81·7%)
Imported	46,419 (1·2%)	54,972 (1·3%)	11,49,717 (21·7%)	9,09,676 (18·3%)
(iii) *Jute, Hemp, etc.*—				
Indigenous	19,11,724 (96%)	15,75,548 (97·1%)	14,08,901 (98 %)	39,55,785 (99·2%)
Imported	80,568 (4 %)	46,330 (2·9%)	28,953 (2 %)	30,868 (·8%)
(iv) *Leather*—				
Indigenous	20,826 (96·1%)	12,034 (96 %)	..	..
Imported	842 (3·9%)	503 (4 %)	..	..

(*b*) Imported stores purchased through the Director General of Stores ..	..	..	..	2,48,062
Total { Indigenous	1,15,98,423 (97·6%)	1,30,31,151 (97·8%)	1,02,56,766 (89·2%)	1,46,95,630 (91·7%)
Total { Imported	2,83,093 (2·4%)	2,95,802 (2·2%)	12,43,354 (10·8%)	13,34,433 (8·3%)
Total	1,18,81,516	1,33,26,953	1,15,00,120	1,60,30,063
(*c*) Stores purchased from Government Departments	..	..	2,08,625	4,48,242
Total Textile and Leather ..	1,18,81,516	1,33,26,953	1,17,08,745	1,64,78,305
II.—ENGINEERING AND MISCELLANEOUS STORES.				
(*a*) Stores purchased in the Indian market	1,47,03,617	1,25,32,145	48,89,196	..
(*b*) Stores purchased direct from outside India	..	..	29,232	..
(*c*) Stores purchased from Government Departments	82,800	52,043	97,228	..
Total Engineering and Miscellaneous Stores	1,47,86,417	1,25,84,188	50,15,656	..
GRAND TOTAL	2,66,67,933	259,11,141	1,67,24,401	1,64,78,305

APPENDIX VI.

A

Value in rupees of stores purchased in each Province during the year 1925-26.



APPENDIX VI.

B

Value and percentage of stores of various descriptions purchased from firms established in the various provinces in India during the year 1925-26 and during the three preceding years.

1922-23.			1923-24.			1924-25.			1925-26.		
—	Rs.	Percentage.	—	Rs.	Percentage.	—	Rs.	Percentage.	—	Rs.	Percentage.
				COTTON.							
Delhi	16,64,828	24	Madras ..	33,40,185	70	U. P.	24,79,122	33	U. P. ..	24,27,414	41·3
Madras ..	16,37,487	24	U. P. ..	5,80,881	12	Madras ..	23,18,658	30·9	Madras ..	15,65,976	26·7
U. P.	15,56,751	23	Delhi ..	3,25,890	7	Delhi	10,42,250	13·9	Bombay ..	11,32,960	19·3
Bombay ..	12,93,290	19	Bombay ..	3,13,702	6·6	Bombay ..	7,43,338	9·9	Bengal ..	3,07,641	5·2
Punjab ..	4,56,561	7	Punjab ..	1,74,723	3·7	Punjab ..	4,29,191	5·7	Delhi ..	2,85,886	4·9
Bengal ..	1,62,173	2	Bengal ..	21,460	·4	Bengal ..	3,13,469	4·2	Punjab ..	1,08,356	1·9
C. P.	65,979	1	C. P. ..	17,267	·3	C. P.	1,65,866	2·2	C. P. ..	43,301	·7
						Gwalior ..	10,310	·2	Burma ..	66	..
Total ..	68,37,069	..	....	47,74,108	..	....	75,02,204	..	....	58,71,600	..

1922-23.			1923-24.			1924-25.			1925-26.		
—	Rs.	Percentage.	—	Rs.	Percentage.	—	Rs.	Percentage.	—	Rs.	Percentage.
				WOOLLEN.							
Madras ..	13,34,268	26·9	U. P. ..	13,04,242	24·6	Madras ..	12,38,830	29·6	Bombay ..	12,28,402	30·7
Bengal ..	11,74,057	23·7	Madras ..	12,04,000	22·8	U. P.	8,53,238	20·4	U. P. ..	10,93,726	27·4
U. P.	11,40,121	23	Delhi ..	10,64,404	20·1	Punjab ..	8,22,780	19·6	Madras ..	6,44,003	16·1
Punjab ..	9,21,290	18·6	Bengal ..	6,82,021	13	Delhi	5,56,003	13·3	Punjab ..	5,90,243	14·8
Bombay ..	1,87,556	3·8	Punjab ..	6,51,460	12·3	Bengal.. ..	4,12,248	9·8	Bengal ..	2,94,787	7·4
B. & O. ..	1,58,137	3·2	Bombay ..	3,55,256	6·7	Bombay ..	3,07,235	7·3	B. & O. ..	75,938	1·9
Delhi	42,550	·8	B. & O. ..	26,775	·5	....	..	..	Delhi ..	68,857	1·7
Jaipur State ..	300	..	....	..	..	....	..	..	....	..	..
Total ..	49,58,279	..	....	52,88,158	..	....	41,90,334	..	....	39,95,956	..

1922-23.			1923-24.			1924-25.			1925-26.		
—	Rs.	Percentage.	—	Rs.	Percentage.	—	Rs.	Percentage.	—	Rs.	Percentage.
					JUTE, HEMP, ETC.						
Bengal.. ..	33,65,129	84·4	Bengal ..	12,73,682	88·6	Bengal ..	12,75,063	78·6	Bengal ..	16,31,398	81·9
Bombay ..	3,35,510	8·4	Bombay ..	57,199	4	Punjab ..	1,55,419	9·6	U. P. ..	1,26,854	6·4
U. P.	1,30,499	3·3	Delhi ..	52,221	3·6	Delhi	1,14,181	7	Bombay ..	1,06,420	5·3
Delhi	1,00,074	2·5	U. P. ..	31,855	2·2	Bombay ..	39,893	2·5	Punjab ..	77,242	3·9
Punjab ..	55,441	1·4	Punjab ..	22,481	1·6	U. P.	37,149	2·3	Delhi ..	29,312	1·5
....	..	..	Madras ..	416	..	Madras ..	173	..	Burma ..	12,625	·6
....	..	..	....	..	..	....	..	..	Madras ..	8,441	·4
Total ..	39,86,653	..	....	14,37,854	..	....	16,21,878	..	....	19,92,292	..
						LEATHER.					
						U. P.	7,049	56·2	U. P. ..	19,374	89·5
						Punjab ..	4,974	39·7	Bombay ..	2,284	10·5
						Bengal.. ..	514	4·1	Bengal ..	10	..
						Total ..	12,537	..	....	21,668	..
					ENGINEERING AND MISCELLANEOUS.						
			Bengal ..	24,02,570	49·1	Bengal.. ..	71,62,624	57·2	Bengal ..	89,22,021	60·7
			Bombay ..	12,06,317	24·7	Bombay ..	39,81,353	31·7	Bombay ..	48,35,764	32·9

			Delhi	9,72,805	19·9	Delhi	6,44,118	5·1	Delhi	5,93,841	4·0
			Punjab	2,41,410	4·9	Punjab	3,82,055	3	Punjab	2,04,481	1·4
			B. & O.	38,300	·8	B. & O.	3,01,862	2·4	U. P.	66,108	·4
			U. P.	27,794	·6	U. P.	34,122	·3	B. & O.	25,794	·2
			....	..	..	Madras	18,281	·2	Burma	21,912	·1
			....	..	..	C. P.	7,390	·1	C. P.	16,212	·1
			....	..	..	Burma	340	..	Madras	8,795	·1
			....	..	..	....	..	..	Rajputana	8,689	·1
			Total	48,89,196	..	....	1,25,32,145	..	....	1,47,03,617	..

TOTAL PURCHASES.

Bengal	47,01,359	29·8	Madras	45,44,601	27·7	Bengal	91,63,918	35·5	Bengal	1,11,55,857	42
Madras	29,71,755	18·8	Bengal	43,79,733	26·7	Bombay	50,71,819	19·6	Bombay	73,05,830	27·5
U. P.	28,27,371	17·9	Delhi	24,15,320	14·7	Madras	35,75,942	13·8	U. P.	37,33,476	14
Bombay	18,16,356	11·5	U. P.	19,44,772	11·9	U. P.	34,10,680	13·2	Madras	22,27,215	8·4
Delhi	18,07,452	11·5	Bombay	19,32,474	11·8	Delhi	23,56,552	9·1	Punjab	9,80,322	3·7
Punjab	14,33,292	9·1	Punjab	10,90,074	6·7	Punjab	17,94,419	6·9	Delhi	9,77,896	3·7
B. & O.	1,58,137	1	B. & O.	65,075	·4	B. & O.	3,01,862	1·2	B. & O.	1,01,732	·4
C. P.	65,979	·4	C. P.	17,267	·1	C. P.	1,73,256	·7	C. P.	59,513	·2
Jaipur State	300	..	....	..	..	Gwalior	10,310	..	Burma	34,603	·1
....	..	..	....	..	..	Burma	340	..	Rajputana	8,689	..
Total	1,57,82,001	..	....	1,63,89,316	..	....	2,58,59,098	..	....	2,65,85,133	..

APPENDIX VII.

Value of Stores Purchased.

(i) HEADQUARTERS.

Note:—The diagrams represent the fees earned and not those actually adjusted during the year.

1922-23

Textiles and leather

Rs. 1,64,78,305

Fees earned

Rs. 1,64,783

1923-24

	Rs.
Textiles and leather . .	1,17,08,745
Engineering and misc. . .	50,15,656
Total .	1.67,24,401

Fees earned

Rs. 1,67,244

1924-25

	Rs.
Textiles and leather . . .	1,24,78,306
Engineering and misc. . . .	1,16,52,299
Total .	2,41,30,605

Fees earned

Rs. 2,41,306

1925-26

	Rs.
Textiles and leather . . .	1,07,14,853
Engineering and misc. . . .	1,25,39,162
Total .	2,32,54,015

Fees earned

Rs. 2,32,540

(ii)—Calcutta Purchase Circle.

(Opened in May 1924.)

Note.—The diagrams represent the fees earned and not those actually adjusted during the year.

1924-25.

	Rs.
Textiles and leather	8,34,831
Engineering and miscellaneous ..	7,68,077
Total ..	16,02,908

Fees earned

Rs. 16,029.

1925-26.

	Rs.
Textiles and leather	11,11,986
Engineering and miscellaneous	12,28,106
Total ..	23,40,092

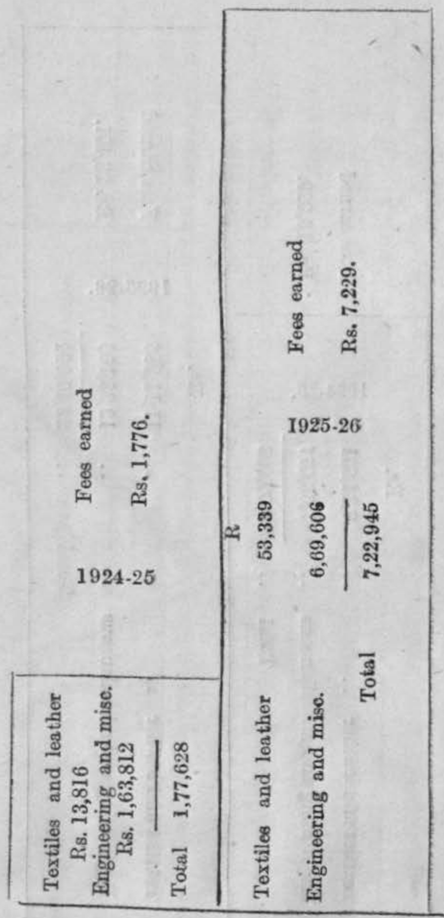
Fees earned

Rs. 23,401.

(iii)—Bombay Purchase Circle.

(Opened in September 1924.)

Note.—The diagrams represent the fees earned and not those actually adjusted during the year.



(iv)—Karachi Purchase Agency.

(Opened in September 1925.)

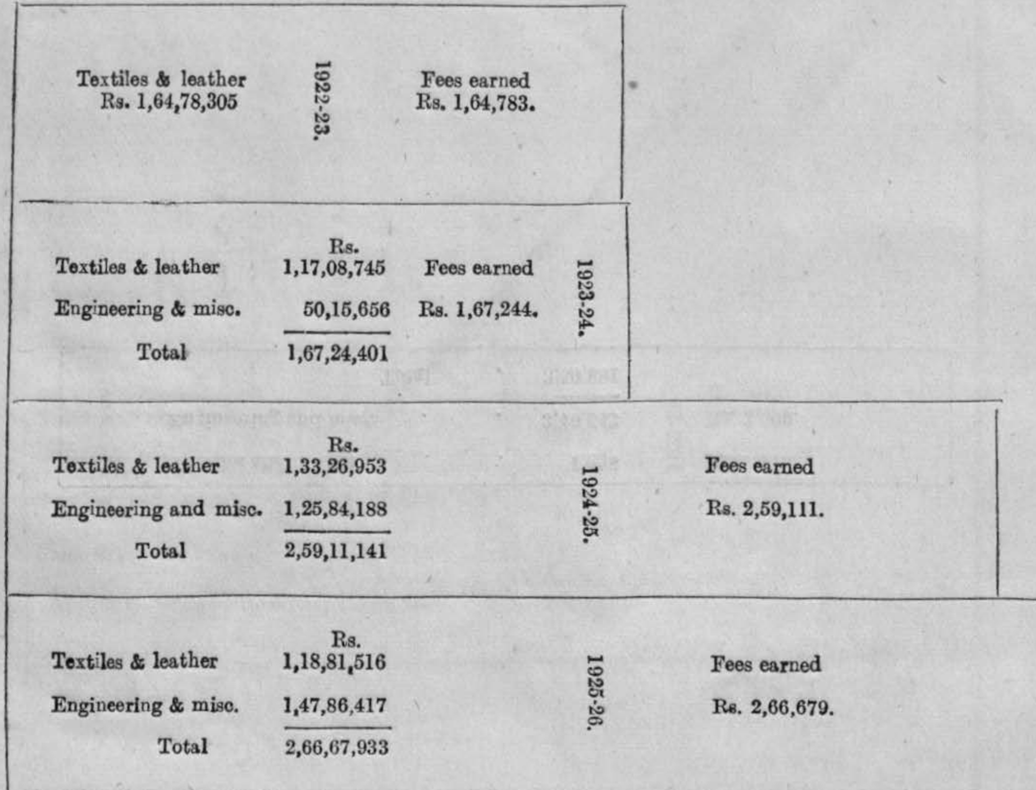
Note.—The diagram represents the fees earned and not those actually adjusted during the year.

1925-26 Fees earned Rs. 3,509.

Textiles and leather .	1,338
Engineering and misc. .	3,49,543
Total .	3,50,881

(v)—ABSTRACT.

Note.—The diagrams represent the fees earned and not those actually adjusted during the year.



APPENDIX VIII.

List of specifications framed by the Indian Stores Department up to the end of the year 1925-26.

INDEX.

Section No.	Name of Stores.		Classification reference.
	Main head.	Sub-head.	
1	Bridgework	..	A
2	Engineers' plant (excluding petty tools).	..	B
3	Workshop machinery and heavy tools.	..	C
4	Ballast and permanent way materials.	..	D
5	Rolling stock	..	E
6	Station materials and fencing.	..	F
7	Tools and stores :— ..	(*a*) Tools	G/Tools
		(*b*) Stores :—	
		(1) Hardware, copper, tin and zincware.	G/Ware.
		(2) Lamps and lamp fittings.	G/Lamps.
		(3) Leather and India rubber goods.	G/Leather.
		(4) Metals	G/Metals.
		(5) Painters' stores (oils and paints).	G/O. P.
		(6) Timber	G/Timber.
		(7) Fuel	G/Fuel.
		(8) Furniture	G/Furniture.
		(9) Cloth, clothing and equipments.	G/Textiles.
		(10) Miscellaneous	G/Mics.
		(11) Stationery ..	G/Stationery.

Section No.	Name of Stores. Main head.	Sub-head.	Classification reference.
		(12) Drawing, mathematical and surveying instruments.	G/Instruments.
	..	(13) Printing Press and materials.	G/Prints.
	..	(14) Sanitary stores.. ..	G/Sanitary.
	..	(15) Waterworks stores ..	G/W. W.
	..	(16) Building materials ..	G/Buildings.
	..	(17) Chemicals	G/Chemicals
8	Electrical plant and materials	..	H
9	Power and industrial plant.	..	P. I.

(A) List of Indian Stores Department general specifications current up to the end of the year 1925-26.

Specification No.	Description.	Current edition.	Remarks.
	SECTION 1.—*Bridgework.*—A.		
A/33	Steelwork	A/33/E.	
A/34	Sheet, steel piling with clutch ..	A/34	
A/35	*Structural steel; Plates, sections, e.g., angles, tees, joists, channels, etc., and bars.*	*A/35/F* ..	*Revised twice during the period.*
A/40 ..	Bridgework	A/40	
	SECTION 2.—*Engineers' plant (excluding petty Tools)*—B.		
B/45	Vertical boiler	B/45	
B/50	Locomultitubular boiler ..	B/50/1	
B/51	Five ton protable hand operated crane for 5′6″ gauge railway track.	B/51	
B/52	Scotch hand derrick crane, constructed of steel.	B/52	
B/53	Hand operated overhead travelling and traversing cranes.	B/53/A.	
	SECTION 3.—*Workshop Machinery and Heavy Tools.*—C.		
C/31 ..	Machine tools	C/31	
	SECTION 4.—*Ballast and Permanent Way Materials.*—D.		
D/1	*Steelwork for light railway track for construction work.*	*D/1/A* ..	*Also revised once.*
D/2 ..	*Tip trucks for 1′ 6″, 2′ 0″ and 2′ 6″ gauge railway, contractor's type.*	*D/2/B* ..	*Also revised twice.*

Specification No.	Description.	Current edition.	Remarks.
	SECTION 5.—*Rolling Stock*.—E.		
E/28	Weighbridge	E/28	
E/29	Engine turntable	E/29	
E/32	Steam locomotive crane ..	E/32	
E/33	Steel fish bolts and nuts ..	E/33/A.	
E/34	Steel dog spikes	E/34/A.	
E/35	Steel round spikes for rail chairs	E/35/A.	
E/36	Steel screw spikes for railways ..	E/36	
E/37	*Laminated springs*	*E/37/A* ..	*Revised once.*
E/ 38.. ..	Cast steel wheels with axles for 2′ 6″ gauge.	E/38	
E/42	Mild steel rivets	E/42/A.	
E/47	Mild steel bolts, nuts and washers	E/47	
E/48	*Cast steel wheels and axles for light tip trucks and unimportant works.*	*E/48*	
E/49	*Cast iron superheater headers for locos. for railways.*	*E/49*	
E/50	*Steel tyres for locomotives, tenders, carriages and wagons.*	*E/50*	
	SECTION 7.—*Tools and Stores.* (*b*)	*Stores.*	
	(1) *Hardware, copper, tin and zinc ware—G/Ware.*		
G/Ware/30 ..	Wire, ordinary steel, black and galvanized.	G/Ware/30/A.	
„ 31 ..	Iron and steel hoops	G/Ware/31/A.	
	(2) *Lamps and Lamp Fittings.—G/Lamps.*		
G/Lamps/1 ..	*Dark lanterns, dafadars* ..	*G/Lamps/1*	

Specification No.	Description.	Current edition.	Remarks.
	(3) *Leather and india rubber goods.—G/L.*		
G/L/38 ..	*Vacuum brake rubber fittings for use on railways.*	*G/L/38*	
„ 39 ..	Solid tyres for cycles	„ 39	
„ *40* ..	*Solid tyres and tyre bands for tractors, lorries, etc.*	„ *40/A.* ..	*Revised once.*
„ *41* ..	*Pneumatic tyres and outer covers and inner tubes for cycle cars and motor cycles, etc.*	„ *41/B.* ..	„
„ *42* ..	*Pneumatic tyres, outer covers and inner tubes for cycles.*	„ *42*	
	(4) *Metals.—G/Metals.*		
G/Metal/9 ..	Manganese steel castings ..	G/Metal/9	
„ 16 ..	Mild steel rods for ferro-concrete work.	„ 16/A.	
„ 21 ..	Short link chains	„ 21	
„ 40 ..	Tinned plates	„ 40/A.	
„ 41 ..	Sheets, galvanized steel, flat or corrugated.	„ 41/B.	
„ 42 ..	Sheets, plain galvanised iron ..	„ 42	
„ 45 ..	Sheets, milled lead	„ 45	
„ 46 ..	Pig lead	„ 46	
„ 51 ..	Small ropes or cords of steel wire	„ 51	
„ 53 ..	Solder	„ 53	
„ 54 ..	Tin stick for tinning	„ 54-A.	
„ 55 ..	Tin in ingots	„ 55	
„ 56 ..	Copper in ingots	„ 56	
„ *57* ..	*White metal in ingots for axlebox lining.*	„ *57*	
„ *58* ..	*Copper sheets, annealed for spinning or cold working.*	„ *58*	

Specification No.	Description.	Current edition.	Remarks.
G/Metal/59 ..	*Brass sheets, annealed for spinning or cold working.*	*G/Metal/59*	
" 60 ..	*Zinc sheets*	*" 60*	
	(5) *Painters' stores.—G/O. P.*		
G/O.P./3 ..	Shellac	G/O.P./3	
" 4 ..	Spirits, denatured, methylated ..	" 4	
" 5 ..	Oil, castor	" 5/A.	
" 6 ..	Oil, transformer	" 6/A.	
" 7 ..	Oil, switch	" 7	
" 9 ..	Oil, shafting	" 9	
" 10 ..	Oil, spindle	" 10/A.	
" 11 ..	Oil, spindle, light	" 11	
" 12 ..	*Oil, spindle, extra light*	*" 12/A.* ..	*Revised once.*
" 13 ..	Oil, aircraft, medium	" 13	
" 14 ..	Oil, aircraft, heavy	" 14	
" 15 ..	Oil, I. C. engine, extra heavy ..	" 15/A.	
" 16 ..	Oil, I. C. engine, heavy ..	" 16	
" 17 ..	Oil, I. C. engine, light	" 17/A.	
" 18 ..	Oil, I. C. engine, medium ..	" 18/A.	
" 19 ..	Oil, lubricating, common dark ..	" 19/A.	
" 20 ..	Oil, lubricating axle, hot weather	" 20/A.	
" 21 ..	Oil, lubricating axle, cold weather	" 21/A.	
" 22 ..	Oil, lubricating, steam engine cylinder, ordinary.	" 22/A.	
" 23 ..	Oil, lubricating, steam engine cylinder, common.	" 23/A.	
" 24 ..	Oil, lubricating, steam engine cylinder, super-heat.	" 24/A.	

Specification No.		Description.	Current edition.	Remarks.
G/O.P./25	..	*Oil, crank chamber*	G/O.P./25/C. ..	*Revised once.*
„ 27	..	Oil, machinery, heavy for bearings	„ 27/A.	
„ 28	..	Oil, machinery, light	„ 28	
„ 29	..	Oil engine, heavy	„ 29/A.	
„ 30	..	Oil engine, medium	„ 30	
„ 33	..	Creosote	„ 33/A.	
„ 34	..	Oil, kerosine, I quality ..	„ 34/A.	
„ 35	..	Oil, kerosine, II quality ..	„ 35/A.	
„ 36	..	Oil, kerosine, III quality ..	„ 36/A.	
„ 37	..	Petrol, mechanical transport ..	„ 37/A.	
„ 38	..	Petrol, aviation	„ 38	
„ 44	..	Oil, sealing	„ 44/B.	
„ 45	..	Oil, mustard or rape	„ 45	
„ 46	..	Oil, cocoanut	„ 46	
„ 48	..	Tallow	„ 48	
„ 50	..	Grease, cup	„ 50/A.	
„ 51	..	Grease, graphite	„ 51/B.	
„ 52	..	Mineral jelly	„ 52	
„ 54	..	Oil, non-freezing, light ..	„ 54	
„ 55	..	Oil, non-freezing, extra light ..	„ 55	
„ 56	..	Oil, fuel, I quality	„ 56	
„ 57	..	Oil, fuel, II quality	„ 57	
„ 58	..	Oil, mineral colza	„ 58	
„ 60	..	Soap, hard	„ 60	
„ 61	..	Soap, soft	„ 61	
„ 67	..	*Wood tar*	„ *67/A.* ..	*Revised once.*

Specification No.	Description.	Current edition.	Remarks.
G/O.P./70 ..	Oil, lubricating, heavy, for compressors.	G/O.P./70	
„ 71 ..	Oil, lubricating, medium, for compressors.	„ 71	
„ 72 ..	Oil, lubricating, light, for compressors.	„ 72	
„ *94* ..	*Oil, lubricating axle, for use in all weathers.*	„ *94*	
G/O.P./95 to 149	*Paints, and painter's materials* ..	*G/O.P./95 to 149*	
G/O.P./150 ..	*Oil, filtered cylinder, pure mineral*	„ **150/A.*	**Changed from special specifications to general ones.*
„ *151* ..	*Oil, filtered cylinder, compound* ..	„ **151/A.*	
„ *154* ..	*Oil, dark cylinder, compounded* ..	„ *154*	
	(6) *Timber.—G/Timber.*		
G/Timber/30 ..	*Deodar sleepers*	*G/Timber/30-A*	*Revised once.*
„ 34 ..	Teak squares	„ 34-A.	
„ *35* ..	*Teak scantlings*	„ *35*	
	(9) *Cloth, clothing and equipment. —G/Textiles.*		
G/Tex/C/1 ..	Cotton twine 5/10s	G/Tex/C/1.	
„ 2 ..	Drill cotton, khaki (medium quality).	„ 2	
„ 3 ..	Drill cotton, white, bleached, medium quality.	„ 3	
„ *4* ..	*Cotton canvas, brown*	„ *4*	
„ *5* ..	*Gauze absorbent, cotton, white bleached.*	„ *5*	
„ *6* ..	*Boy messenger's bag*	„ *6*	
„ *7* ..	*Sheets, ground*	„ *7*	
„ *8* ..	*Paulins, cotton*	„ *8*	

Specification No.	Description.	Current edition.	Remarks.
G/Tex/C/9 ..	*Durries, blue striped*	*G/Tex/C/9*	
„ *10* ..	*Bags, kit*	„ *10*	
„ *11* ..	*Bags, ration, waterproof* ..	„ *11*	
„ *12* ..	*Haversack*	„ *12*	
„ *13* ..	*Capes, waterproof, Indian, with hood*	„ *13*	
„ *14* ..	*Capes, waterproof, Burman* ..	„ *14*	
„ *15* ..	*Newar gray*	„ *15*	
„ *16* ..	*Cotton puttie, khaki*	„ *16*	
„ *17* ..	*Capes with hood, waterproof, for Postal Department.*	„ *17*	
„ 21 ..	Bags, dosooti, postal	„ 21	
„ 22 ..	Drill cotton, blue	„ 22/A.	
„ 23 ..	Drill cotton, gray	„ 23	
„ *30* ..	*Sheeting, unbleached*	„ *30*	
„ *34* ..	*Muslin (bleached)*	„ *34*	
„ *35* ..	*Long cloth, unbleached for bandages*	„ *35*	
„ *36* ..	*Bandage cloth (bleached)* ..	„ *36*	
„ 49 ..	Waste cotton, white No. 1-A. ..	„ 49/A.	
„ 50 ..	Waste cotton, white No. 1-B. ..	„ 50	
„ 51 ..	Waste cotton, coloured No. 2 ..	„ 51	
„ *52* ..	*Waste cotton, white or coloured for cleaning ordinary machinery.*	„ *52*	
G/Tex/W/1 ..	Wool black and mixed for blankets	G/Tex/W/1	
„ *15* ..	*Serge, white for medical and veterinary requirements.*	„ *15*	
„ *16* ..	*Flannel, white*	„ *16*	
G/Tex/F/1 ..	Superintendent's camp bag, flax canvas, single.	G/T	

Specification No.		Description.	Current edition.	Remarks.
G/Tex/F/2	..	Superintendent's camp bag, flax canvas,, double.	G/Tex/F/2	
" 4	..	*Bags, nose*	" 4	
" 5	..	*Buckets, canvas for ponies* ..	" 5	
" 6	..	Planter's bag, unproofed, flax canvas.	" 6	
" 45	..	Dowlas, 54"	" 45	
" 46	..	*Paulins*	" 46/A.	*Revised once.*
G/Tex/H/3	..	Hemp twine, English and country	G/Tex/H/3.	
G/Tex/J/1	..	Jute twine, 1 ply, 2 ply, 3 ply, 4 ply, 5 ply and 6 ply.	G/Tex/J/1.	
" 5	..	*Proofed jute mail bags*	" 5/A.	*Revised once.*
" 11	..	*Planter's jute bag, unproofed with locking arrangements.*	" 11/A.	"
" 12	..	*Jute bags, unproofed for lineman's tools.*	" 12/A.	"
" 16	..	*Proofed jute mail bags, single* ..	" 16/A.	"
" 17	..	*Proofed jute mail bags, double* ..	" 17/A.	"
" 18	..	*Unproofed jute mail bags, single* ..	" 18/A.	"
" 22	..	*Jute parcel bags, special size* ..	" 22	
" 23	..	*Jute paulins*	" 23/B.	*Revised twice.*
" 24	..	*Planter's jute bag with locking arrangement.*	" 24/A.	"
" 32	..	*Jute canvas No. C-2 bag* ..	" 32	
		(10) *Miscellaneous.—G/Misc.*		
G/Misc./1	..	*Pad locks and locks, box, drawers, etc.*	*G/Misc./1/B* ..	*Revised twice.*
" 2	..	*Carbide of calcium*	" 2	
" 3	..	*Kit boxes for sea service for M.E.S.*	" 3	

Specification No.	Description.	Current edition.	Remarks.
	(15) *Waterworks stores—G/W.W.*		
G/W.W/27 ..	Salt glazed earthenware pipes ..	G/W.W/27 ..	
„ 28 ..	Wrought iron or mild steel pipes for steam.	„ 28/A.	
„ 29 ..	Wrought iron or mild steel pipes for gas.	„ 29/B.	
„ 30 ..	Wrought iron or mild steel pipes for water.	„ 30/A.	
„ 32 ..	Cast iron pipes and special casting	„ 32.	
„ 43 ..	Lead pipes for water	„ 43.	
	(17) *Chemicals.—G/Chemicals.*		
G/Chemicals/9 ..	Nitric acid, commercial ..	G/Chemicals/9	
„ 11 ..	Hydrochloric acid, commercial ..	„ 11.	
„ 12 ..	Hydrochloric acid, pure ..	„ 12.	
„ 14 ..	Sulphuric acid, concentrated ..	„ 14.	
„ 15 ..	Sulphuric acid, commercial ..	„ 15.	
SECTION 8.—*Electrical Plant and Materials.*—*H.*			
H/45	*Steel poles, tubular type, for electric power transmission.*	*H/45.*	
H/46	Electrical flexible cords, single conductors, etc.	H/46/A.	
H/48	Alternating current ceiling fans ..	H/48.	
H/50	Bridge megger testing set ..	H/50.	
H/51	Control panel D. C. Motor, iron-clad.	H/51/A.	
H/52	Normal type tungsten filament incandescent lamp.	H/52/A.	
H/53	Carbon filament electric lamps ..	H/53.	
H/54	Gas filled tungsten filament incandescent electric lamps.	H/54/A.	
H/55	Fans, ceiling and regulator (D. C.)	H/55/A.	

Specification No.	Description.	Current edition.	Remarks.
H/56	Copper wire, hard drawn bare ..	H/56/A.	
H/57	Cable electric, single V. I. R. ..	H/57.	
H/58	Wood casing and caping ..	H/58/A.	
H/60	Copper wire, hard drawn for telegraph or telephones.	H/60.	
	SECTION 9.—*Power and industrial plant.—P. I.*		
P.I./12 ..	Electric machinery	P.I./12.	
„ 19 ..	Dragline excavator, oil engine operated.	„ 19.	
„ 20 ..	Dragline excavator light weight, steam operated, coal firing.	„ 20.	
„ 26 ..	Jolly boat	„ 26.	
„ 35 ..	Dragline excavator, light weight steam operated, coal or oil firing.	„ 35.	
„ 36 ..	Electric hoists or winches ..	„ 36.	
„ 37 ..	Dredgers (grab type)	„ 37.	
„ *38* ..	*Petrol paraffin engine*	„ *38/B.* ..	*Revised once.*
„ 39 ..	Belting for power drive ..	„ 39/A.	
„ 40 ..	Motor boat	„ 40.	
„ 42 ..	Steam pile driving plant ..	„ 42.	
„ *43* ..	*Crude oil Engine*	„ *43/B.* ..	*Revised once.*
„ 44 ..	Dragline excavator (heavy type)	„ 44.	
„ 45 ..	Dragline excavator, medium weight, steam operated coal or oil firing.	„ 45.	
„ 49 ..	Dragline excavator	„ 49.	
„ 60 ..	Centrifugal pumps	„ 60.	
„ 61 ..	Stone breaker, etc., oil engine driven.	„ 61.	

Specification No.	Description.	Current edition.	Remarks.
P.I. 62 ..	Mortar grinding mill	P. I. 62.	
„ *65* ..	*Dragline excavator, special light weight, steam operated, coal or oil firing.*	„ *65/A.* ..	*Revised once.*
„ 75 ..	Rotary converter	„ 75.	
„ 76 ..	Electric power transformers ..	„ 76.	
„ 80 ..	Plant and machinery	„ 80.	
„ 81 ..	D. C. switchboard	„ 81.	
„ 82 ..	D. C. generator, 3 wire type and static balancers.	„ 82.	
„ *95* ..	*Electrically operated, overhead, travelling and traversing crane.*	„ *95.*	

Note.—Specifications framed during the year 1925-26 have been shown in *italics*. Specifications revised during the year 1925-26 have been shown in *italics* and marked as revised.

(B) List of special specifications framed by the Indian Stores Department up to the end of the year 1925-26.

Specification No.	Description.	Remarks.
	SECTION I.—*Bridgework.—A.*	
A/31	Standard mobilization steel hutting.	
A/32	The steel and iron work required by the Indian Public Works Department, Delhi, for the roofing of the Assembly, the Council of State and the Council of Princes' Chambers and Library of the New Legislative Buildings, Imperial Delhi.	
A/36	Special construction quarters (portable hutting), for the Lloyd Barrage Project.	
	SECTION 2.—*Engineers' Plant (Excluding Petty Tools).—B.*	
B/48	Portable steam pumping engine equipment with vertical boiler and hose pipe for the Bikaner Canal, Punjab.	
B/49	One—7 ton Scotch hand derrick crane for the Irrigation Department, Punjab.	
	SECTION 5.—*Rolling Stock.—E.*	
E/30 ..	Metre gauge steam rail motor with goods truck and goods trailer truck required for the Sutlej Valley Project, Punjab Public Works Department.	
E/31	Steam locomotives, 2′—0″ gauge, for the Sutlej Valley Project, Bikaner Canal, Punjab Public Works Department.	
E/40 ..	Steam locomotives, 2′—0″ gauge, for the Lloyd Barrack Project.	
	SECTION 7.—(10) *Miscellaneous.—G./Misc.*	
G/misc./4 ..	*Boxes, tinned plate, for the Postmaster-General, Bombay.*	
,, *5* ..	*Despatch boxes, for the Postmaster-General, Bombay.*	
,, *6* ..	*Safes for the Director-General of Posts and Telegraphs.*	
,, *7* ..	*Insurance seal type boxes for the Postmaster-General, Bombay.*	

Specification No.	Description.	Remarks.
	SECTION 7.—(5) *Painters Stores.—G./O. P.*	
G/O.P.43 ..	Oils for use of Government Telegraph Department.	
G./O.P./150 ..	*High speed engine superheated steam cylinder oil, pure mineral, filtered, for O. & R. Railway.*	
" 151 ..	*High speed engine superheated steam cylinder oil, compounded, filtered , for O. & R. Railway.*	
" 152 ..	*Oil, lubricating crank chamber, high speed steam engine No. 2, for O. & R. Railway.*	
G/O.P./153 ..	*K-1 oil kerosine in bulk suitable for gas making, for O. and R. Railway.*	
	(15) *Water Works Stores.—G./W.W.*	
G/W.W./31 ..	Wrought iron or mild steel pipes for water for the Bikaner Canal.	
	SECTION 8.—*Electrical Plant and materials.—H.*	
H/39	A. C. punkha motors and controlgear, etc.	
H/59	One switchboard generator panel for Ambala.	
H/61	Low and medium pressure paper insulated lead covered and steel tape armoured, 3 core and and 2 core electric cables for the Indian Public Works Department, Delhi.	
	SECTION 9.—*Power and Industrial Plant.—P. I.*	
P.I./27 ..	Heave-up boat for the Lloyd Barrage Works, Sukkur.	
" 41 ..	Pile driver and frame for the Sutlej Valley Project.	
" 46 ..	Steam and exhaust piping for the Nalagarh Power House.	
" 47 ..	Two 25 K. W. oil engine driven generating sets and switchboard for the B. I. Barracks, Lahore.	
" 48 ..	Turbo-alternator set, condensing plant, cranes, boiler, economiser, pumps, steel chimney, steam and exhaust pipework, switchboard, motor converter set, rotary converters, sub-station plant, extra high tension feeder cables and auxiliaries for the P. W. D., Delhi.	

Specification No.	Description.	Remarks.
P.I. 50 ..	Concrete mixers and prime movers required for the Bikaner Canal, Sutlej Valley Project.	
„ 51 ..	Stone breaker plant and screens for the Nalagarh Quarries, Sutlej Valley Irrigation Project.	
„ 52 ..	Generating plant, transformers, switchgear, pump and motors, for the Nalagarh Quarries Power Plant, Punjab Irrigation Department.	
„ 53 ..	Generating plant, transformers, switchgear, pump and motors, for the Ferozepore Division Power plant, Punjab Irrigation Department.	
„ 54 ..	Concrete mixers with motors for the Sutlej Valley Project.	
„ 55 ..	One 53·4 K. V. A. oil engine driven A. C. generating set with exciter for the Northern India Salt Revenue Department, Sambhar Lake.	
„ 56 ..	Switchgear for the N. I. S. R. Deptt., Sambhar Lake.	
„ 57 ..	A. C. motor and controlgear for the Government of India Press, Simla.	
„ 58 ..	A. C. motors, controlgear, main switch panel, cable work and wiring for the experimental Spinning Plant and Technological Laboratory of the Indian Central Cotton Committee, Bombay.	
„ 59 ..	Two 4 K. W. oil engine driven generating sets and switchboards for the Military Works Services, Nowshera Sub-District, Northern Command	
„ 63 ..	Passenger, goods and service lifts required by the Indian Public Works Department, for the new Legislative Buildings, Delhi.	
„ 64 ..	Passenger, goods and service lifts required by the Indian Public Works Department for Government House, Delhi.	
„ 66 ..	Oil Engine alternator set water cooling plant, crane, switchgear and cables for power station; transformer switchgear and cables for a sub-station for the Lloyd Barrage Works, Sukkur.	

Specification No.	Description.	Remarks.
P.I./70 ..	Oil engine dynamo sets, main fuel tank complete with pipework, water cooling plant, crane, switchgear and cables for power station; and motors, controlgears and cables for the press machinery for the Government Postal Press, Aligarh.	
" 78 ..	Additional oil engine alternator sets, water cooling plants, transformers, switchgear and cables for the power station of the Lloyd Barrage Works, Sukkur.	
" 79 ..	Concrete blockyard plant for the Lloyd Barrage Project, Sukkur.	
" 83 ..	325 K. W. oil engine alternator sets, water cooling plant, oil fuel storage tank complete with pipework, crane, transformers, switchgear and connecting cables, induction motors, E. H. T. feeder cables and accessories for power station and miscellaneous plant; for Salt Mines, Khewra.	
" 84 ..	Goods lifts for Postal Press, Aligarh	
" 85 ..	Electrically driven pumping machinery mounted on pontoons for dewatering coffer dams for the Lloyd Barrage Works, Sukkur.	
" *86* ..	*Oil Engine driven power plant for the New Power Station, M. B. Mussoorie.*	
" *87* ..	*Plant for hydro-electric scheme, M. B. Mussoorie*	
" *88* ..	*Oil engine driven power station for Jaipore* ..	
" 89 ..	Pile driving plant mounted on pontoons for the Lloyd Barrage Works, Sukkur.	
" *90* ..	*Scotch derrick crane, motor driven, to lift 25 and 10 tons, on pontoons for the Lloyd Barrage Works, Sukkur.*	
" *91* ..	*Steam driven paddle tugs for the Lloyd Barrage Works, Sukkur.*	
" *92* ..	*Barges for the Lloyd Barrage Works, Sukkur.*	
" *93* ..	*Oil engine driven (diesel) Bucyrus dragline excavators, 30 B, for the Lloyd Barrage Works, Sukkur.*	

Specification No.	Description.	Remarks.
P.I./94 ..	*Oil engine driven (diesel) Bucyrus dragline excavators, 50 B, for the Lloyd Barrage Works, Sukkur.*	
„ *97* ..	*30-B diesel engine driven Bucyrus dragline excavator for the Lloyd Barrage Works, Sukkur.*	

Specifications framed during the year 1925-26 have been italicised.

APPENDIX VIII-A.

List of Schedules of Requirements framed by the Indian Stores Department up to the end of the year 1925-26.

S. R. No.	Subject.	Remarks.
	(a) *Framed prior to 1925-26.*	
1	Oil engine driven generating set and switchboard for B. I. Barracks, Lahore.	
2	Portable centrifugal pumping equipment with engine petrol paraffin for Punjab.	
3	Oil engine driven A. C. generating set Nothern India Salt Revenue Department.	
4	Oil engine driven generating set and switchboard for Military Works Service, Nowshera.	
5	Dragline excavator for Chananwala, Punjab.	
6	15 B. H. P. oil engine for Sukkur, Sind.	
7	Centrifugal pumping equipment with oil engine for Sukkur, Sind.	
8	Scotch hand derrick crane constructed of steel for Sukkur area.	
9	Stone crushing plant complete with oil engine equipment for Sukkur area.	
10	Weigh bridge for Sukkur area.	
11	Belting for power drive.	
12	Cable electric single V. I. R. insulated (250 volts 600 megohm grade).	
13	Steam locomotive crane for Sukkur area.	
14	Steam pile driving plant for Sukkur area.	
15	Steel sheet piling for Sukkur area.	
16	Pile driver and frame for Sutlej Valley Project.	
17	Fuel pumping equipment for Peshawar.	
18	Electric hoist or winch for Punjab.	
19	Water storage tanks complete with steel staging for Sukkur area.	

S. R. No.	Subject.	Remarks.
20	Wood casing and capping for electric wiring.	
21	Laminated springs for wagons class C. 3	
22	Machine tools.	
23	Direct current ceiling fans.	
24	Variable speed D. C. motor and controlgear for Forest Research Institute College, Dehradun.	
25	10 B. H. P. oil engine complete with generator and switchboard for Kasauli Hill.	
26	Wrought iron pipe and fittings for water for Sukkur area.	
27	Mixed paints and linseed oils and turpentine.	
28	Hand operated overhead travelling and traversing crane for Lahore.	
29	Dredger, grab type, for Sutlej Valley Project.	
30	Motor boat.	
31	Reduced white lead (stiff paint).	
32	Steelwork for the workshop building for the Lloyd Barrage.	
33	D. C. iron clad flexible unit type starting panel for Ambala.	
34	Cast iron pipes for Sukkur area.	
35	Moter grinding mill coupled with oil engine equipment.	
36	Kerosine oil engine for Lahore, Punjab.	
37	15—18 H. P. oil engine, crude, for Punjab.	
38	Steel fishbolts and nuts for British Standards 90 lbs. rail.	
39	Motor driven house service centrifugal pumping equipment for Solemanke.	
40	Electric hoist or winch for Punjab.	
41	12½ B. H. P. kerosine oil engine horizontal type for Saidgi, Waziristan.	

S. R. No.	Subject.	Remarks.
42	Mild steel rods for ferro concrete work for Bakshankhan.	
43	Mixed paints linseed oils and turpentines.	
44	Steelwork for roofing of New Power House, Delhi.	
45	Shunt wound direct current generator and panel.	
46	Wrought iron pipes and fittings.	
47	Steel sheet piling for Sukkur area.	
74	Petrol engine driven pump for fire service.	
75	Air compressor 500 c.ft. belt drive with crude oil engine.	
76	Dragline excavator light weight caterpillar type steam operated coal or oil firing or crude oil engine drive.	
77	Dog spikes.	
78	Steam pipes and fittings for Government Model Tannery, Shahdara.	
79	D. C. motors control panels and appliances for Mechanical Transport Workshops, Peshawar.	
80	Dragline excavator special C type steam operated coal firing.	
81	5-ton hand operated crane for head work Western Jumna Canal.	
82	Bridge over Weir at Sulemanke Sutlej Valley Project. (Chananwala).	
83	Pump motor and controlgear for Military Works Service, Manzai, Waziristan.	
84	8-ton hand operated crane for the Sutlej Valley Project.	
85	Oils, lubricating and petrol.	
86	Electric fans on single phase 50 cycle 240 volts. A. C. for Director General of Posts and Telegraphs.	
87	Direct current motor and controlgear.	
88	Oil engine centrifugal pumping equipment.	
89	Ruston 6 dragline excavator for Hafizabad.	

S. R. No.	Subject.	Remarks.
90	D. C. motors with control panels and half couplings and accessories for Mechanical Transport Workshops, Peshawar.	
91	Electrically driven centrifugal pumping equipment for the P. W. D., N. W. F. P.	
92	Rotary converter set complete with step down transformer and starting and control equipment.	
93	Combined 2′—0″ gauge rail and road bridge over Islam Weir, Sutlej Valley Project.	
94	Alternating current ceiling fans and accessories.	
95	Dragline excavator, light weight, caterpillar type, crude oil engine drive.	
96	Motor generator set and extra motor for cinema work, Viceregal Estates, Simla and Delhi.	
97	Electric motor, starter and switch for the Metallurgical Inspectorate, Jamshedpur.	
98	Pumping plant for Dagshai Water Supply.	
99	Tube well pumping for Allahabad.	
100	Mild steel tank, 1,500 gallons capacity on steel staging 7′—0″ high.	
101	Scotch hand derrick cranes constructed of steel.	
102	Workshops and workshop plant and machinery for Lloyd Barrage Project.	
103	Motor and oil engine driven air compressor for Lloyd Barrage Project.	
104	Light Railway material for Lloyd Barrage Project.	
107	Electrically driven pumping sets for Gopi, Head Works, Rawalpindi.	
108	Structural steel for R. C. tank Risalpur, N. W. Railway.	
109	Shafting and accessories for Ginning Factory, Jaipur State.	
110	Steel girders for Ball Room, Government House, Delhi.	

S. R. No.	Subject.	Remarks.
111	Electrically driven centrifugal pumping equipment, Lahore Cantonment.	
112	Steel work for Workshop Building (Janvri Station) Rohri.	
113	Crude oil engine, Lloyd Barrage Works, Janvri Station.	
114	A. C. motors for Lloyd Barrage Works.	
115	Steel wire rope for dragline excavators.	
116	Oil engine driven direct current generator sets and switchgear for Military Engineering Service, Jhansi.	
117	Cast iron wheels and special D class steel axles for the Chief Ordnance Officer, Rawalpindi.	
118	16 B. H. P. crude oil engine for Lahore.	
119	D. C. motor and controlgear for Bannu.	
120	Steam and hand operated all round derrick cranes for the Lloyd Barrage Works.	
121	Portable centrifugal equipment, Jaipur, Rajputana.	
122	Fuel oil and water tanks and staging, and oil engines and pumps for water and oil pumping for the Lloyd Barrage Project.	
123	Electrically operated gantry cranes for the Lloyd Barrage Works.	
124	Pumping and electric generating plant for camp, Miranshah.	
127	Pumping equipment for M. E. S., Sangor.	
128	Mild steel tank on steel staging with roof.	
129	Hand operated crane for Lloyd Barrage Project, Rohri.	
130	Steel wire rope, extra flexible, galvanised.	
131	Telephone system for Jaipur city.	
132	Two-ton hand operated overhead travelling crane.	
133	Pumping equipment for Dalowali.	
134	Hand operated overhead travelling crane.	

S. R. No.	Subject.	Remarks.
135	5 K. W. oil engine driven dynamo set and switchboard Hindubagh Baluchistan.	
136	Oil engine driven centrifugal pumping equipment.	
137	Roof trusses and roofing for engine shed for Sukkur and Janvari, Lloyd Barrage Project.	
138	Power Plant for Jubbulpur.	
139	Petrol engine driven centrifugal pumping equipment for fire service for Peshawar.	
140	Fuel oil storage tank, Lloyd Barrage Works, Sukkur.	
141	Electric motor for Postal Press, Aligarh.	
142	Tank galvanized iron, water, and small pumping equipment for the Postal Press, Aligarh.	
143	Oil engine driven generator set for Allahabad.	
144	Steel tanks and oil engine driven pumping equipment for L. B. W.	
145	Triple ram pump and oil engine.	
146	Galvanized steel row boat.	
147	Motor lorries for water.	
148	Oil tanks and pumps for Sutlej Valley Project.	
149	Material trolley for Lloyd Barrage and Canal Construction Works.	
150	Bowstring girder bridge to carry water mains, Delhi.	
151	Cast iron wheels and mild steel axles.	
152	Gantry for Jhansi Power House.	
153	600 megohm grade V. I. R. insulated cables and flexible cord.	
154	500-1000 gallons per hour ram pump.	
155	Steel roof for Power House, Lloyd Barrage Works, Sukkur.	
156	Small electrically driven ice plant for Sulemanke Headworks.	

S. R. No.	Subject.	Remarks.
157	Roofing for Power House, Khewra.	
158	Portable concrete mixers and prime movers, for Lloyd Barrage Works, Sukkur.	
159	Steelwork for Multan Water Works.	
160	Bridge over Islam Weir.	
161	Motor wound reversable and control panel for Lyallpur.	
162	Variable speed shunt wound motor and controlgear for Government Press, Delhi.	
163	Crude oil engines, 5 B. H. P. for Sialkot.	
164	Steelwork for Store Shed on left bank.	
165	Lancashire Boiler for Government Opium Factory, Ghaziabad.	
166	Air compressors concrete rammers rivetters and flexible piping.	
167	Pumping plant for Khanna Dak, Chaklala.	
	(b) Framed during 1925-26.	
168	Crushing tester for Lloyd Barrage Works, Sukkur.	
169	6,600 volts subaqueous cable and boxes for the Lloyd Barrage, Sukkur.	
170	Steelwork for switchboard gallery Power House, Lloyd Barrage Works, Sukkur.	
171	Two-ton overhead travelling and traversing crane for Oudh and Rohilkhand Railway, Lucknow.	
172	Centrifugal pump for the Lloyd Barrage Works, Sukkur, Sind.	
173	Machine tools and other plant for the Central Workshops, Mysore Railway.	
174	Transformers for the Lloyd Barrage Works, Sukkur.	
175	Diesel oil engine driven dragline excavators caterpillar type.	
176	Workshop plant and machinery for the Lloyd Barrage Works, Sukkur.	

S. R. No.	Subject.	Remarks.
177	Miscellaneous sub-station equipment for the Lloyd Barrage, Sukkur.	
178	Poles for over-head power distribution for the Lloyd Barrage, Sukkur.	
179	Electrification of Mari-Indus M. E. S. (Northern Command.)	
180	Sub-station equipment for Municipal Board, Mussoorie (S. R. revised and numbered 184).	
181	Portable pump for petrol.	
182	Oil engine driven generators and switchboard for Razmak.	
183	Flexible air hose for the Sutlej Valley Project.	
184	Sub-station equipment for Municipal Board, Mussorie (S. R. changed from 180).	
185	Steelwork and roofing for stables for the Assistant Garrison Engineer, M.E.S., Bareilly.	
186	Steam driven rope operated overhead travelling and traversing crane.	
187	Paraffin engine D. C. generator set for Quetta.	
188	Motor driven oil pump and piping for Power Supply, Lloyd Barrage Works.	
189/R	Steelwork and roofing for Power House, Shahjahanpur, M. E. S.	
190	Hand operated overhead travelling and traversing crane.	
191	Counterbalance boxes for sluice gates for Ferozepore Weir, Sutlej Valley Project.	
192	Low pressure turbine drive generator set condensing plant and accessories.	
193	Storage battery for Imperial Institute Veterinary Research, Muktesar.	
194	Oil engine driven D. C. generator sets and switchboard for M.E.S., Jhansi.	
195	Steelwork Jaipur Power House, Jaipur Station.	

S. R. No.	Subject.	Remarks.
196	Pumping equipment for Kohat District.	
197/R	Steelwork and roofing for M. E. S., Razmak, Waziristan (revised once).	
198	Tube well with motor driven pump.	
199	Ford lorry 1 ton for C [illegible]i, Sutlej Valley Project.	
200	Steel trough flooring, M. E. S.	
201	Water tube boiler for Forest Research Institute, Dehra Dun.	
202	Double girder hand operated overhead travelling and traversing crane.	
203	Combined dragline excavator and grabditcher for Sheikhupura Division, Punjab.	
204	Pressed steel tanks for Assistant Garrison Royal Engineer, Lahore.	
205	Electrically driven centrifugal pumps for the Sutlej Valley Project.	
206/R	Boulton water elevator for M. E. S. (S. R. revised once).	
207	Refined oil engine for the Assistant Garrison Royal Engineer, Lahore.	
208	Vertical boiler for steam pump 100 lbs. per sq. inch pressure for M. E. S.	
209	Self-supporting steel chimney for M. E. S. Clothing Factory, Shahjahanpur.	
210	A 10 ton steam road roller for M. E. S., Abbottabad.	
211	Hoist, drag-derricking and tipping ropes and slewing stays for No. 300 dragline excavator, Ruston's make.	
212	Lancashire Boiler, for the Opium Agent and Commissioner of Income-Tax, U. P.	
213	Mortar mills and motors for the Lloyd Barrage and Canal Construction, Sukkur.	
214	Road roller equipment for the P. W. D., Irrigation Branch, Punjab.	

S. R. No.	Subject.	Remarks.
215	Power distribution equipment for Jaipore	
216	Mild steel tanks for water storage for the Legislative Council Chambers, Imperial Delhi.	
217	A steel barge for the Indian Cotton Committee.	
218	Electrically driven pumping equipment for water supply, Bareilly, M. E. S.	
219/R.	Steel trusses for workshops roof and steelwork and roofing for siding shelters for M. E. S., Shajahanpur. (S. R. Revised once.)	
220	Mild steel tank with steel staging and complete with galvanized corrugated sheet steel curved roof for M. E. S., Ranikhet.	
221	Petrol engine driven centrifugal pumping equipment, Fire Protection Scheme, R. A. F., Risalpur.	
222	Self sustaining pulley block and trolley for water supply, M. E. S., Bareilly.	
223/R.	Storage tank, hand pumping storage cabinets and filters for lubricating oils for the Government Postal Press, Aligarh. (S. R. revised once.)	
224	Power Station Plant for Ferozepore Cantonment.	
225	Steam road rollers.	
226	Lea coal meter for mechanical stoker.	
227	Miscellaneous electrical distribution equipment for Jaipur.	
228	Light railway materials for the Lloyd Barrage Works.	
229	150 B. H. P. 3,300 volts motor for the Ginning Factory, Jaipur.	
230	Electrically driven tube well pumping sets for Multan Water Works.	
231	Dog spikes for the Lloyd Barrage Works, and Canal Construction.	
232	Fishbolts and nuts, fishplates, and 62 or 60 lbs. rails for the Lloyd Barrage Works and Canal Construction.	

S. R. No.	Subject.	Remarks.
233/R.	Portable stone crushers with screens and crude oil engine or alternatively electric motor driven for the Lloyd Barrage Works. (S. R. revised once.)	
234/R.	Stone breaking plant screens hoppers and oil engines for the Lloyd Barrage and Canal Construction, Sukkur. (S. R. revised once.)	
235	Right and left hand turnouts for the Lloyd Barrage and Canal Construction.	
236	Target frames for M. E. S.	
237	Mild steel moulding boxes for moulding concrete blocks for Lloyd Barrage Works.	
238	Vertical cross tube boiler for the Agricultural Department, Government of India, Bangalore.	
239	Steel bins for pneumatic tyre stores, M. E. S.	
240	Disintegrators with portable steam engines for surkhi grinding.	
241	Oil engine centrifugal pumping sets for sewage water, P. W. D., Punjab.	
242	Light railway construction track and stock for Lloyd Barrage Works, Sind.	
243	Water supply plant for Lloyd Barrage Works.	
244	Fishplates, fishbolts and nuts for Lloyd Barrage Works.	
245	Galvanized steel tanks for Lloyd Barrage Works.	
246	Tip trucks.	
247/R.	Plywood chests for Benares Opium Agency. (S. R. revised once.)	
248	Oil engine driven pumping set for M. E. S. (S. R. cancelled.)	
249	Black Ashphalt and Bitumen for the Public Works Department, Central Provinces.	
250	Rack bars for canal regulators, Irrigation Department, Baluchistan.	
251	Oil piping and pump for Jaipur.	

S. R. No.	Subject.	Remarks.
252	Rubber tyred platform trucks for carriage of boxes.	
253	Lever boxes and lever connecting rods for the Lloyd Barrage Works.	
254	Blocks and wire rope for Islam Division, Sutlej Valley Project.	
255	Clorinator tanks for M. E. S.	
256	Switchboard for M. E. S., Rawalpindi.	
257	Steam or hand operated crane for use on broad gauge for Sutlej Valley Project.	
258	Jolly boats for Lloyd Barrage Works, Sind.	
259	2′-0″ gauge locos, tip trucks, 20 lb. rails, crossings.	
260	One manual fire engine for the Lloyd Barrage Works.	
261	Oil engine driven centrifugal pumping set for M. E. S., Waziristan.	
262	Pipework and fittings for Jaipur Power Plant.	
263	Rotary balancer set and switchboard for M. E. S., Lahore.	
264	Electrically driven pumping equipment for Pumping Station, West Ridge, Rawalpindi.	
265/R.	Steelwork and roofing material for M. E. S. (S. R. revised once.)	
266	Boring tools and plant for central canal No. 2 Division.	
267	4-ton petrol lorries Mandi Hydro-Electric Scheme.	
268	Hoisting crabs, for the Executive Engineer, Islam Division, Sutlej Valley Project.	
269	Oil engine driven power pumping plant for Matheran Water Supply.	
270	Sentinel Patent Locomotive.	
271	Motor driven fuel oil pumping set and pipework for Power Station, Salt Range Division, Khewra.	
272	Tip wagons.	
273	25 B. H. P. Kersine oil engine for M. E. S., Mandalay.	

S. R. No.	Subject.	Remarks.
274	Iron wheel barrows.	
275	Boring tools and plant for Canal Construction, Western Circle, Karachi.	
276	Alumina-Ferric.	
277	Direct current and single phase alternating current ceiling fans.	
278	Railway material metre gauge.	
279	Goods lifts for Imperial Record Office and Secretariat West Wing, Delhi.	
280	E. H. T. main feeder panels for the Public Works Department, Delhi.	
281	Steel materials for N. W. Railway.	
282	Motor driven house service centrifugal pumping equipment for P. W. D., Delhi.	
283	20—30 H. P. Fiat Touring car, Model de luxe 510.	
284	Internal combustion tractor and ploughs for the P. W. D., Delhi.	
285	Motor launches and Norwegian skiffs.	
286	Alumina-ferric for the Public Works Department, Delhi.	
287	Mild steel moulding boxes, moulding concrete blocks.	
288	Dogspikes.	
289	Disintegrator, circular saw and band saw.	
290	Two ply boards.	
291	5 K. W. oil engine driven generator sets switch-board and pumping sets for Jandola.	
292	Asphalt and tar, etc., for the Public Works Department, Punjab.	
293	Power Plant for Nagpur Station, G. I. P. Railway.	
294	Portable internal combustion engine air compressor set.	

S. R. No.	Subject.	Remarks.
295	Electrically driven overhead hoisting traversing and travelling cranes for the Chief Forest Officers, Andaman.	
296	Tip wagons.	
297	Water meters.	
298	Motor launch.	
299	Fire extinguishers.	
300	Automatic and manual telephone equipment for Hydro-electric Scheme, Punjab.	
301	Hand or bullock power pump.	
302	Steam road rollers Tanden Type.	
303	Combined steam grab and dragline excavators.	
304	Electrically driven centrifugal pumping equipment for M. E. S., Rawalpindi.	
305	Four Tyne scarifier, Independent type.	
306	Asphalt cookers and Bitumen boilers.	
307	Steel water tank and staging.	
308	Tin trays for the Postal Department.	
309	54′-0″ span supporting girders and sliding doors.	
310	Vertical boiler and feed pump.	
311	Cement testing apparatus .	
312	Double bogie cars and platform wagons 2′-0″ gauge.	
313	One K. W. petrol-paraffin engine driven dynamo set with switchboard for M. E. S. Murree.	
314	Sheet steel flume.	
315	Diesel oil engine and ice making plant for the Maclagan Engineering College, Moghalpura, Lahore.	
316/R.	3 spans of 23′-6″ clear (S. R. revised once.)	
317	Mild steel moulding boxes for moulding concrete blocks.	

S. R. No.	Subject.	Remarks.
318	Shafting cranks, etc., for electrically driven punkhas.	
319	Steam operated pump and steam plant for Poona Water Works.	
320/R.	Oil engine driven power plant for Kapadvanj Water Supply.	
321	Lead seals for Postal Service, Bombay.	
322	Bridge girders for A. B. Railway.	
323	Portable workshop for use with dragline excavator for Sukkur.	
324	Steel flexible wire ropes, galvanized for the Public Works Department, Punjab.	
325	Trucks, mild steel for 2′-6″ gauge for Northern India Salt Revenue Department.	
326	Weighbridge for broad gauge track for the Public Works Department, Punjab.	

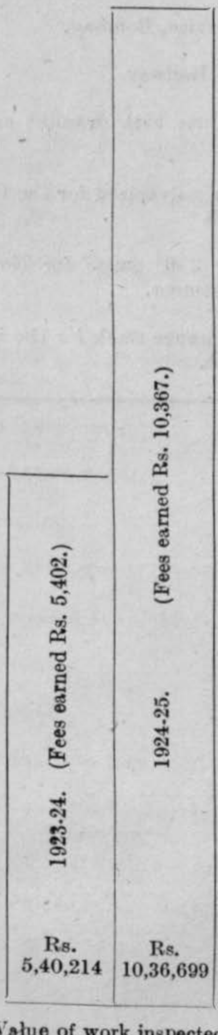
APPENDIX IX.

WORK DONE BY THE INSPECTION BRANCH.

(*i*)—Headquarters.

Note.—(i) **All inspection work was accounted for through the Provincial Inspectorates from 1st April 1925 ; hence no figures are given for 1925-26.**

(ii) The diagrams represent fees earned and not those actually adjusted during the year.

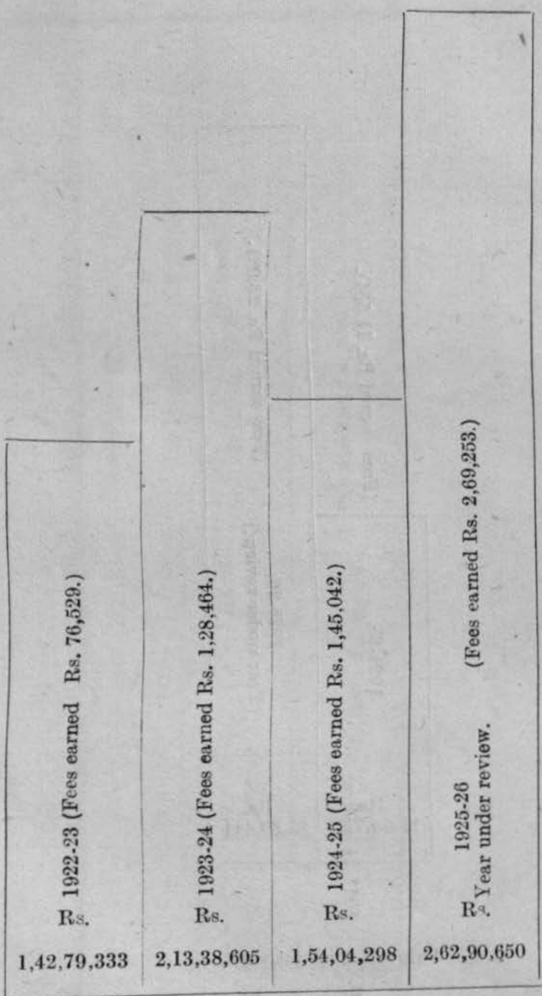


Value of work inspected.

(*ii*)—CALCUTTA INSPECTION CIRCLE.

Note.—(*i*) The figures shown in the previous report have been revised on account of adjustments subsequently made.

(*ii*) The diagrams represent fees earned and not those actually adjusted during the year.

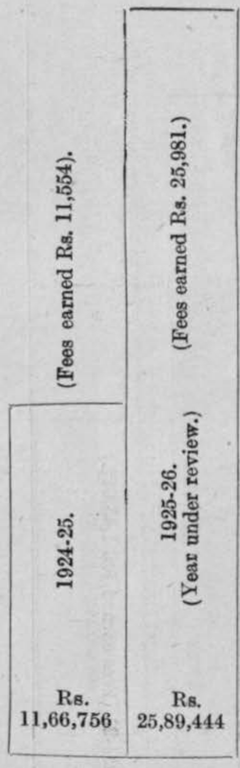


Value of work inspected.

(*iii*)—Bombay Inspection Circle.

(*Opened in July 1924.*)

Note.—The diagrams represent fees earned and not those actually adjusted during the year.

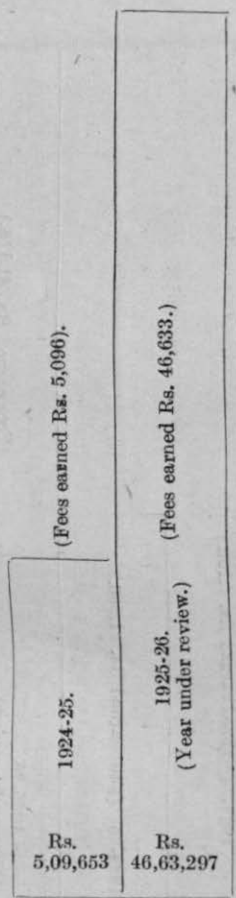


Value of work inspected.

(*iv*)—Cawnpore Inspection Circle.

(*Opened in September 1924.*)

Note.—The diagrams represent fees earned and not those actually adjusted during the year.

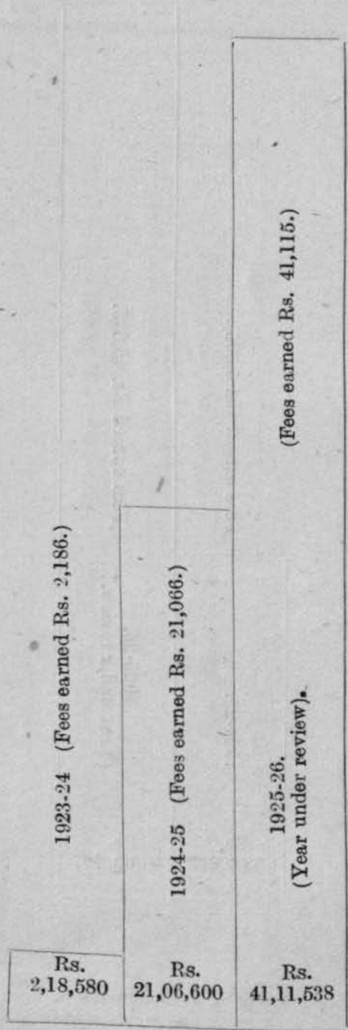


Value of work inspected.

(v)—KARACHI INSPECTION AGENCY.

(Opened in January 1924.)

Note.—The diagrams represent fees earned and not those actually adjusted during the year.

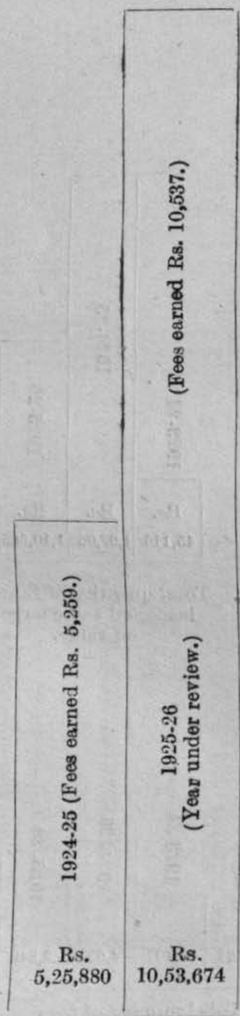


Value of work inspected.

(*vi*)—MADRAS INSPECTION BRANCH.

(*Opened in July 1924.*)

Note—The diagrams represent fees earned and not those actually adjusted during the year.



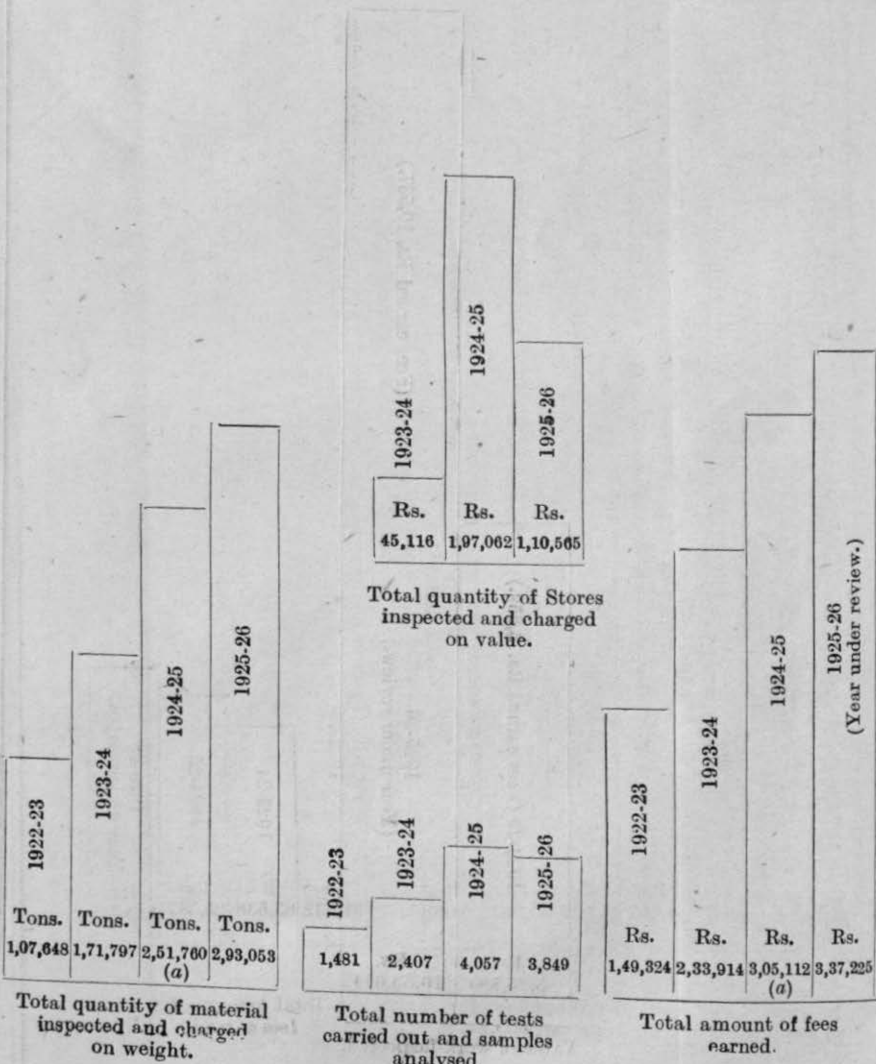
Value of work inspected.

(*vii*)—Metallurgical Inspectorate, Jamshedpur.

Comparative Statement of work and revenue.

(*a*) The figures shown in the Administration Report for 1924-25 have been revised on account of adjustments subsequently made.

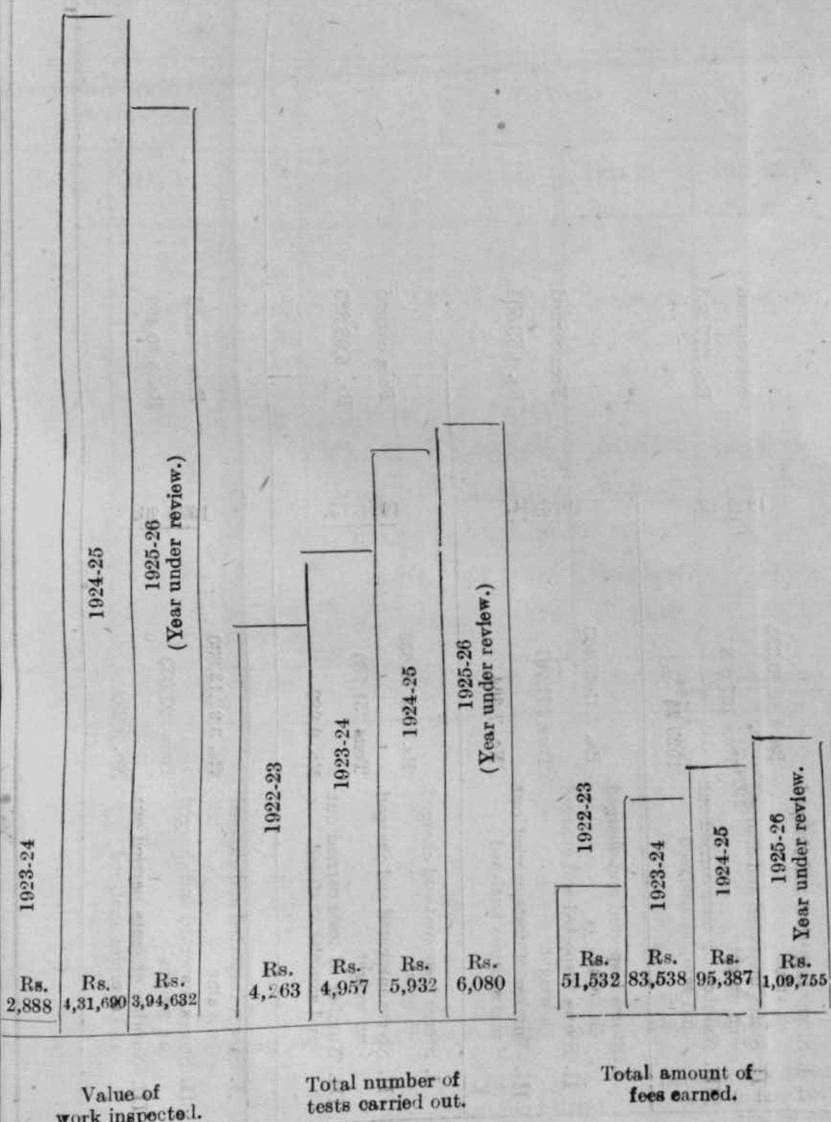
Note.—The diagrams represent fees earned and not those actually adjusted during the year.



(*viii*)—GOVERNMENT TEST HOUSE, ALIPORE, CALCUTTA.

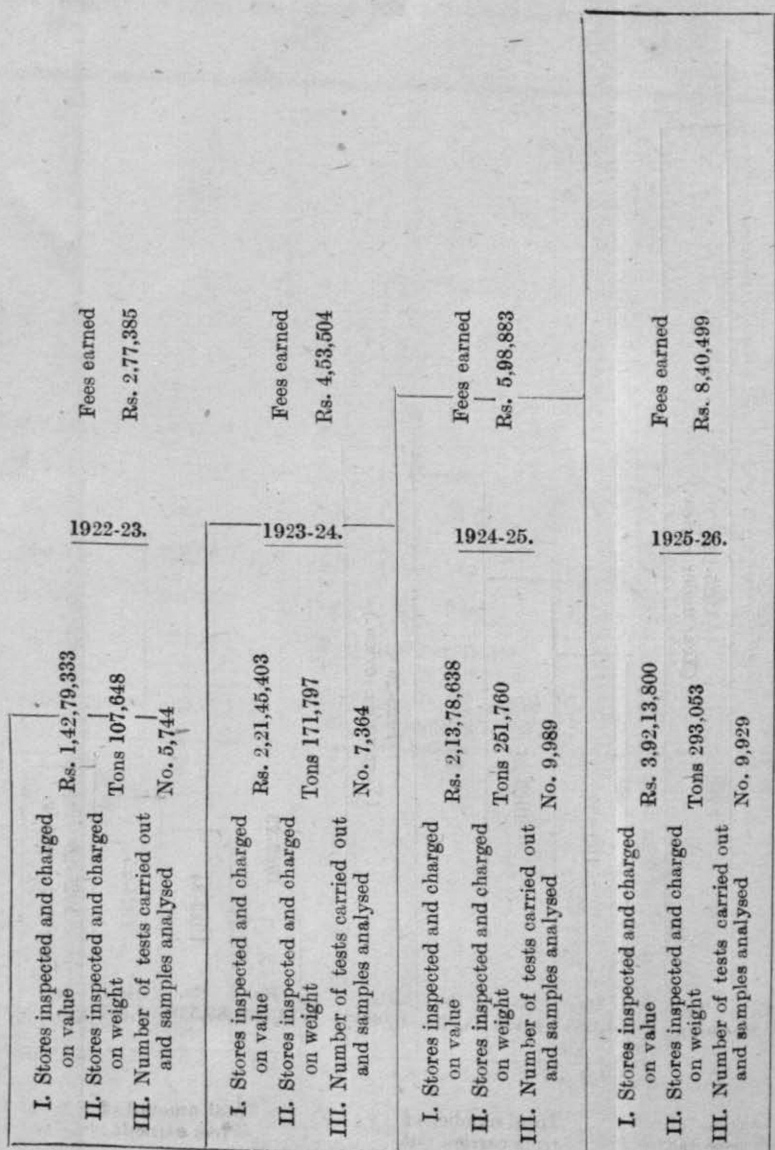
Comparative Statement of work and revenue.

Note.—The diagrams represent fees earned and not those actually adjusted during the year.



(*ix*)—Abstract of Total Work done in the Inspection Branch of the Indian Stores Department.

Note.—The diagrams represent fees earned and not those actually adjusted during the year.



APPENDIX X.

STATEMENT SHOWING INSPECTION WORK CARRIED OUT FOR VARIOUS AUTHORITIES.

Authorities on whose behalf stores were inspected.	Material charged on weight. METALLURGICAL INSPECTORATE JAMSHEDPUR. 1922-23.	1923-24.	1924-25.	1925-26.	Material charged on value. CALCUTTA. (including Test House, Alipore and Metallurgical Inspectorate, Jamshedpur). 1922-23.	1923-24.	1924-25.	1925-26.
	Tons.	Tons.	Tons.	Tons.	Rs.	Rs.	Rs.	Rs.
I. Inspection of stores against orders placed by the Indian Stores Department.	..	..	..	..	..	11,74,741	41,36,425	52,03,965
II. Inspection of stores against orders placed by other authorities.	..	..	..	..	..	..	..	..
1. Central Government departments ..	..	126	681	1,274	1,82,743	24,433	2,12,228	1,65,275
2. State worked Railways	29,008	35,305	21,942	49,307	1,15,70,375	1,40,01,618	67,96,874	1,56,29,414
3. Company worked Railways ..	30,533	44,507	88,473	70,187	23,46,154	53,43,253	39,00,383	56,03,816
4. Provincial Governments ..	..	..	..	..	1,44,483	5,68,101	6,90,927	89,125
5. Public bodies	..	..	..	..	35,578	2,74,288	2,32,106	93,184
6. Private concerns and Indian States	48,107	91,859	140,664	172,285	..	175	64,107	11,068
Total ..	107,648	171,797	251,760	293,053	1,42,79,333	2,13,86,609	1,60,33,050	2,67,95,847
						Includes G. T. H= 2,888	4,31,690	3,94,632
						,, M. I. =45,116	1,97,062	1,10,565

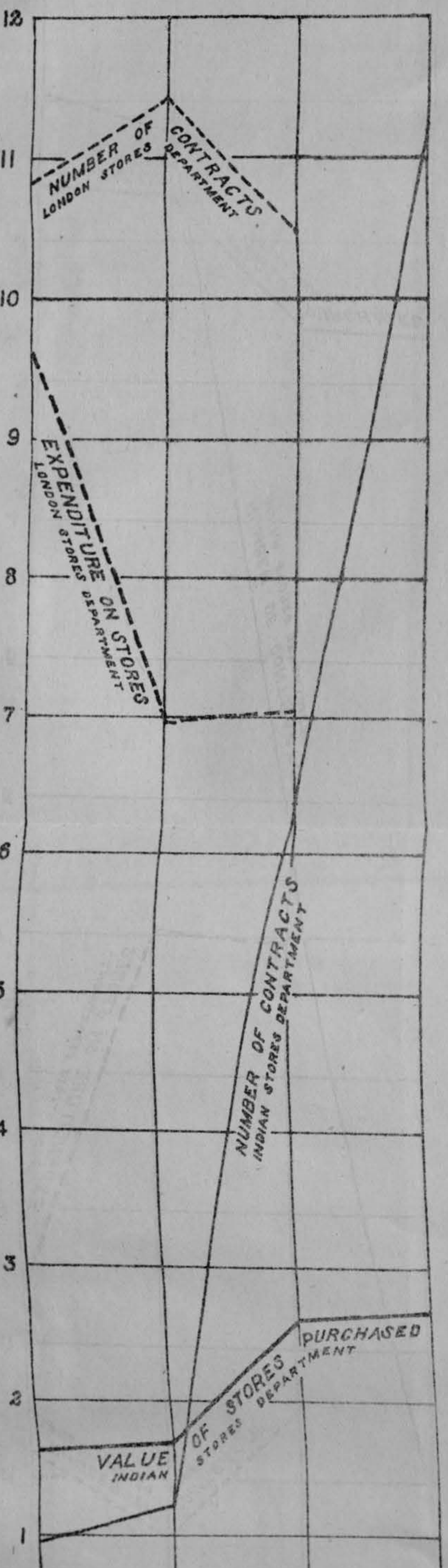
Authorities on whose behalf stores were inspected.	BOMBAY. 1922-23.	1923-24.	1924-25.	1925-26.	CAWNPORE. (including Headquarters). 1922-23.	1923-24.	1924-25.	1925-26.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Inspection of stores against orders placed by the Indian Stores Department.	..	..	11,22,678	23,89,806	..	5,40,214	15,34,920	44,77,122
II. Inspection of stores against orders placed by other authorities.	..	..	..	..	..	..	..	..
1. Central Government departments ..	..	..	..	..	..	..	7,512	..
2. State worked Railways	..	..	44,078	1,23,343	..	..	3,920	1,86,175
3. Company worked Railways ..	..	..	..	58,353	..	..	..	..
4. Provincial Governments ..	..	..	..	3,880	..	..	..	..
5. Public bodies	..	..	..	3,000	..	..	..	..
6. Private concerns and Indian States	..	..	..	11,062	..	..	..	..
Total ..	..	..	11,66,756	25,89,444	..	5,40,214	15,46,352	46,63,297
						Includes Head Qrs.=5,40,214	10,36,699	

Authorities on whose behalf stores were inspected.	KARACHI. 1922-23.	1923-24.	1924-25.	1925-26.	MADRAS. 1922-23.	1923-24.	1924-25.	1925-26.	TOTAL. 1922-23.	1923-24.	1924-25.	1925-26.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Inspection of stores against orders placed by the Indian Stores Department.	..	2,18,580	20,48,800	40,28,062	..	..	5,25,880	10,53,674	..	19,33,535	93,68,703	1,71,52,629
II. Inspection of stores against orders placed by other authorities.	..	..	..	..	..	..	..	..	..	..	..	..
1. Central Government departments ..	..	..	..	..	..	..	..	..	1,82,743	24,433	2,19,740	1,65,275
2. State worked Railways	..	..	57,800	1,476	..	..	..	..	1,15,70,375	1,40,01,618	69,02,672	1,59,40,408
3. Company worked Railways ..	..	..	..	..	..	..	..	..	23,46,154	53,43,253	39,00,383	56,62,169
4. Provincial Governments ..	..	..	..	82,000	..	..	..	..	1,44,483	5,68,101	6,90,927	1,75,005
5. Public bodies	..	..	..	..	..	..	..	..	35,578	2,74,288	2,32,106	96,184
6. Private concerns and Indian States	..	..	..	..	..	..	..	..	..	175	64,107	22,130
Total ..	..	2,18,580	21,06,600	41,11,538	..	..	5,25,880	10,53,674	1,42.79,333	2,21,45,403	2,13,78,638	3,92,13,800

APPENDIX XI

VALUE OF STORES PURCHASED & NUMBER OF CONTRACTS PLACED BY THE LONDON AND INDIAN STORES DEPARTMENTS.

Value of stores in crores of rupees (add 7 noughts)
Number of contracts in thousands (add 3 noughts)



NOTE.-

The London Stores Department figures represent expenditure on stores and freight converted into Indian currency at a uniform rate of 1s. 6d. to the rupee. The

APPENDIX XII.

Apparatus installed at the Metallurgical Inspectorate, Jamshedpur. (The additions made during the year are shown in italics).

Mechanical Laboratory.

The machine shop is equipped with tools by means of which test-pieces and experimental samples of any desired shape can be prepared. The Metallurgical Inspector is in a position to undertake the testing and investigation of any metallic materials of whatever size which may be submitted to him.

The following testing-machines are available for mechanical tests :—

(1) A 50-ton vertical testing-machine of single-lever type, for tensile, compression, bending and shear tests.

(2) A 10,000 lb. vertical testing-machine for tensile tests on wires and on other material of small cross-section.

(3) A torsion testing-machine for wire.

(4) Hardness testing-machines for application of the Brinell hardness test—

(*a*) One machine has a useful range of load of 0 to 4,000 kilogrammes.

(*b*) Another machine has a useful range of load of 5 to 50 kilogrammes. This is valuable in the case of small samples and thin material such as strips or sheets, for detecting variations of hardness, etc.

(5) An impact testing-machine of the Izod single-blow type, with a maximum striking energy of 120 foot-pounds.

(6) A mirror-extensometer, by means of which the extension of a tensile test-piece, while under load, can be measured with an accuracy of about 1|1,25,000th inch. This enables the elastic limit which for many purposes is the most important mechanical property of a ductile metal, to be determined with great accuracy.

(7) A 50-ton calibrating box for testing the accuracy of testing-machines up to loads of 50 tons in either tension or compression. By this means any deterioration of the main testing machine can be detected and corrections made for the error ; and as the box is portable, different testing machines can be compared with one another.

(8) A transverse testing-machine for measuring the breaking load and deflection of cast-iron bars under transverse load.

In addition, arrangements can usually be made with Messrs. Tata or the Jamshedpur Technical Institute, for the use of the following machines :—

(9) A falling weight test machine capable of delivering blows up to 35 foot-tons.

(10) A 100-ton tensile and compression testing-machine (horizontal).

(11) Impact testing-machines of the Charpy singleblow type (chiefly used on the Continent of Europe) with striking energies equivalent to about 220 and 1,450 foot pounds respectively.

(12) A Sankey alternating bend test machine.

Miscellaneous.

1. Potentiometer, Double Switch Bridge, Resistances standardised by the National Physical Laboratory and Standard Weston Cell by means of which resistances, including the resistance of high conductivity of copper wire and cables, can be accurately measured and voltmeters, ammeters, and standard resistances can be accurately calibrated.

2. *A large latest type Reichert Metallographic Microscope with photo camera for examining and photographing the structure of metals. This apparatus, equipped with a series of objectives having focal lengths ranging from 100 m. m. micropolar to 2 m. m. apochromat is equally suited for low and high power microphotography.*

3. Two gas-fired furnaces for experimental heat-treatment of metals—one being provided with a device for pre-heated air supply so that high temperatures can be obtained.

4. *A platinum resistance thermometer with Whipple Indicator made by the Cambridge and Paul Instrument Company, suitable for measuring temperatures up to 1,200° C. and for calibrating pyrometers of other types.*

5. Apparatus with Platinum Electrodes for electrolytic analysis with rotating electrodes.

APPENDIX XIII.

The Government Test House is equipped with the apparatus mentioned below by means of which tests can be carried out for Government and Public Departments at a small charge. The additions made during the year are shown in italics.

I.—PHYSICAL SECTION.

1. *Testing machines and apparatus.*

Engineering Sub-section—

1. One 100-ton Buckton Horizontal Testing Machine, hydraulically controlled, for tensile, compression and transverse bend testing. This machine takes test-pieces up to a maximum size of 10 feet. It is suitable for steel and metal bars, steel wire ropes, chains, railway couplings, stone and concrete blocks, bricks, etc.

2. One 10-ton Avery Testing Machine for tensile, compression and transverse bend testing.

3. One 10,000 lbs. Avery Universal Testing Machine for tensile, compression, transverse and torsion testing.

4. One Ewing Extensometer complete with marking off jig for test-pieces.

5. *One 12″ Newall Measuring Machine.*

6. One 120 foot-lbs. Avery Izod type Impact Testing Machine for carrying out notched-bar tests on metals.

7. One Buckton double-sided Cold and Temper Bend Testing Machine.

8. One Avery Fatigue Testing Machine. This machine is of rotating bar type in which the test specimens are subjected to a uniform bending moment while revolved about their own axes.

9. One Brinell Hardness Testing Machine for determining the hardness of all metals and alloys.

10. One 5 foot-ton Avery Impact Testing Machine for carrying out impact tests on railway couplings and draw-gears.

11. One Thurston Oil Testing Machine for testing oils under practical conditions of use.

12. One Hydraulic Testing Machine for testing stoneware and other pipes up to 18″ in diameter and 3′—0″ in length.

13. One Bailey Hydraulic Testing Machine for carrying out porosity and pressure tests on cocks, valves, etc.

14. One Brotherhood Pressure Gauge Testing Apparatus, 0—6,000 lbs. per sq. inch.

15. Budenberg Gauge Test Sets, one suitable for pressures of 0—2,000 lbs. per. sq. inch and another for pressures of 0—5 tons per sq. inch.

16. *One "Compactum" hydraulic pressure test-pump, 1,500 lbs. per sq. inch capacity, for general hydraulic pressure tests.*

17. One Brotherhood Vacuum Gauge Testing Apparatus.

18. Plant and apparatus for testing vacuum brake rubber fittings.

19. One Vacuum Gauge Testing Apparatus with mercury columns.

20. *One 20-ton Dynamometer (Salters).*

21. *One 0-50 ton Amsler Standardising Box for calibrating testing machines.*

22. One Avery 10 cwt. Platform Weighing Machine.

23. One Microscope.

2. *Machine tools.*

1. One 6″ Centres S. S. and S. C. heavy duty Buckton lathe.

2. One 4″ Centres S. S. and S. C. Holbrook lathe.

3. One Buckton test-piece preparing machine for shaping flat test-pieces for the determination of tensile strength.

4. One Butler shaping and slotting machine.

5. One machine for polishing metal specimens for micro-examination.

6. One Smith and Coventry sensitive drilling machine.

7. One band saw.

8. One power hack saw.

9. One emery grinder.

10. One light motor grinder.

11. One grindstone, treadle driven.

12. One end-runner paint mill.

13. One cone paint mill.

3. *Cement testing sub-section.*

1. One Adie Tensile Testing Machine.

2. One Smith Edward Testing Machine.

3. Vicat Needle Setting Time Testing Sets.

4. Le Chatelier Soundness Testing Sets.

5. One Ro-tap Sieving Machine.

6. Ice-chest for taking setting times under various temperature conditions.

7. One Thermograph.

8. Dry and Wet bulb thermometer.

9. One setting time clock.

10. Maturing tanks, damp boxes, moulds, scales, balances, etc.

4. *Road Metals testing sub-section.*

1. One Deval type 4-cylinder Attrition Testing Machine.

2. One Ball Mill.

3. One Dorry type Abrasion Tester.

5. *Textile testing sub-section.*

1. One Goodbrand-Lea tensile testing machine, 0 — 500 lbs.

2. One Goodbrand Yarn Testing Machine, 0-5 lbs.

3. One Dronsfield Wrap Reel.

4. One 12″ Goodbrand Twist Tester.

5. One Goodbrand Fabric 0-1,000 lbs. Testing Machine.

6. One Avery Cloth fabric Testing Machine, 0-1,200 lbs.

7. One Casartelli Microscope Cloth Counting Glass.

8. One Goodbrand Conditioning Apparatus with balance and wire cage, etc.

6. *Electrical testing sub-section.*

1. One Nalder Bros. and Thomson Ohmmeter.

2. One Wheatstone Bridge with 8-volt portable battery by Elliot Brothers.

3. One complete set of Pritchett and Gold and E. P. S., Co., Ltd., Storage Battery, 250 volts, consisting of 135, S5 type cells, capacity 80 ampere-hours with Plug Board and switch Board, with various ammeters, voltmeters, wattmeters, rheostats, switches, etc.

4. One Elliot Brothers' A. C. and D. C. Ammeter with single phase transformer, 100—600 amperes.

5. One Elliot Brothers' A. C. and D. C. voltmeter with transformer.

6. *One Weston Battery Testing Voltmeter* (*Model 443*).

7. Two Weston Current Transformers (open centre 1,200-5 amps. range. Model 313).

8. Two Weston Potential Transformers (6,600—3,300 to 110 volts. Model 311).

9. One Everett-Edgcumbe direct reading 10-ft. Laboratory Flicker Photometer with standard lamps.

10. One 6″ Lawrence and Mayo Anemometer for measuring Air-velocities from 0—1,000 feet per minute.

7. *Miscellaneous.*

1. One Copper Oven for determining the moisture contents of bricks, concrete blocks, etc.

2. One Portable Forge.

3. Anvils, vices, etc.

II.—CHEMICAL SECTION.

8. *Apparatus and Plant.*

1. Two Motor driven Gas Compressors.

2. One Motor driven Water Pump Set.

3. One Carbon Disulphide Distillation Apparatus.

4. One Cambridge and Paul Thermo-Couple type Pyrometer with three spare tubes containing the Couple.

5. One Cambridge and Paul Optical Pyrometer, polarising type.

6. Two Muffle Furnaces.

7. Two Combustion Furnaces for organic analyses.

8. One Centrifugal Machine, holding 4 tubes of 100 c. c. each.

9. Three Bomb Calorimeter Sets for determination of the calorific value of coal and other fuels.

10. One Electric Furnace by Brady and Martin, special type for determining the amount of volatile matter evolved from coal at different temperatures.

11. One Hutchinson Tar Tester for determination of viscosity of coal-tar.

12. *Accessories for Fleming's Carbon Combustion Apparatus* (*used in steel analysis*) *consisting of phosphoric anhydride jar, zinc tower, mercury gauge, mercury valve, gas washing bottles, reducing valve, silica tube, etc.*

13. One B. T. L. Penetrometer.

14. One Melting Point Determination Apparatus, Ring and Ball method.

15. One Nalder Brothers Volt-ammeter Testing Set (with instrument ranges of 600 volts and amperes).

16. Ten Chemical Balances (*two acquired in 1925-26*).

17. Two Rough Balances.

18. One Westphal Balance.

19. One Microscope.

20. Four Ovens.

21. Six Water Baths.

22. One Vacuum Pump.

23. One Combined Still and Steam Oven Set.

24. One Still (for distilled water).

9. *Oil testing sub-section.*

1. One Zeiss Butyro-Refractometer.

2. One Herschell Emulsifier, motor driven.

3. One Dubosq Calorimeter.

4. One Deely Friction Machine for determining the co-efficient of static friction between lubricated surfaces.

5. Seven Viscometers, Redwood's ordinary pattern.

6. One Viscometer, Redwood's Admiralty pattern, for determining the viscosity of oil fuels.

7. One Viscometer, Redwood, conforming to the standard laid down by the I. P. T.

8. Three Pensky-Martens closed flash point apparatus (high flash).

9. *One Pensky-Martens closed flash point apparatus, conforming to the standard laid down by the I. P. T.*

10. Two Abel-Pensky flash point apparatus (low flash).

11. *One Abel's flash point apparatus conforming to the standard laid down by the I. P. T.*

12. One Archbutt Vaporimeter for determining the volatility of oils used for lubricating steam engine cylinders.

13. One Conradson carbon residue apparatus for determining the carbon obtained from different motor gear, etc., lubricating oils.

14. *One Conradson carbon residue apparatus conforming to the standard laid down by the I. P. T.*

15. *One cloud and pour test apparatus capable of holding six test-jars.*

16. *Two cloud and pour test apparatus capable of holding one test-jar only.*

17. *One standard distillation apparatus with metal condenser for kerosene.*

18. *One distillation apparatus for petrol (Dunstan and Kewley).*

19. *One standard distillation apparatus with screen, etc., for petrol, conforming to the standard laid down by the I. P. T.*

20. *One apparatus for estimation of total sulphur in gasolene as adopted by the I. P. T.*

21. One Lovibond Tintometer.

22. *Six Hinks' single wick table lamps for kerosene burning tests.*

23. Four Chemical Balances (*one acquired in 1925-26*).

24. Two Water-Baths.

25. One Still.

26. One Geyser.

27. One hot air-oven.

ENDIX XIV.

Statement showing the articles tested at the Government Test House, Alipore, during the year 1925-26.

Serial No.	Articles.	Serial No.	Articles.
1	Acids.	27	Chalk.
2	Alum.	28	Clay.
3	Aluminium Sulphate.	29	Cloth of various descriptions (woollen and cotton).
4	Ammonium sulphate.	30	Coal.
5	Antimony.	31	Coke.
6	Apparatus Flash point.	32	Composition (Boiler).
7	Asbestos.	33	Concrete cubes.
8	Asphalt.	34	Concrete Cylinders.
9	Bauxite.	35	Copper.
10	Belting.	36	Cord.
11	Benzine.	37	Cordage Hemp.
12	Bitterns Crude.	38	Deposit.
13	Bitumen.	39	Deposit (carbon).
14	Blacking.	40	Deposit Fluids.
15	Blankets.	41	Disinfectants.
16	Boiler compound.	42	Dust Flue.
17	Borax	43	Fans and Regulators electric.
18	Bottles.	44	Ferric alumina.
19	Brass.	45	Gauges pressure.
20	Bricks.	46	Glue.
21	Bronze.	47	Graphite.
22	Calcium cyanide.	48	Greases.
23	ʼanvas.	49	Gum.
24	C bide (Calcium).	50	Gun metal.
25	Cement.	51	Gunny.
26	Chains.	52	Gypsum.

Serial No.	Articles.	Serial No.	Articles.
53	Hooks, draw bar.	79	Oils.
54	Hydrometer.	80	Oils, cake.
55	Indigo.	81	Oils, creosote.
56	Ink.	82	Paints and Pigments.
57	Iron.	83	Paulins.
58	Iron cast.	84	Petrol.
59	Iron wrought.	85	Pipe Fittings.
60	Kankar.	86	Pipes, iron.
61	Knife.	87	Pipes, Stoneware.
62	Lead.	88	Pipes, Vacuum.
63	Leather.	89	Pitch.
64	Lime.	90	Platinum.
65	Linseed Cake.	91	Plumbago.
66	Liquor Ammon Fort.	92	Polish metal.
67	Magnesium chloride.	93	Putty.
68	Manures.	94	Regulator.
69	Matches Safety.	95	Rods pull.
70	Mercury perchloride.	96	Ropes of kinds (Hemp, Manilla, Wire, etc.).
71	Metal Bearing.	97	Rubber.
72	Metal, Mangolia.	98	Sand.
73	Metal, Type.	99	Scissors.
74	Metal, white.	100	Screw couplings.
75	Mortar.	101	Shackles, draw bar.
76	Mortar and Pestle.	102	Shale.
77	Mud.	103	Shellac.
78	Napthaline.	104	Soap.

Serial No.	Articles.	Serial No.	Articles.
105	Soda ash.	121	Thread, cotton.
106	Soda caustic.	122	Tiles.
107	Sodium silicate.	123	Tin.
108	Soil.	124	Tubes glass.
109	Spirits.	125	Turpentine.
110	Spirit Methylated.	126	Twine (Jute, Hemp, etc.).
111	Steel.	127	Vacuum brake fittings.
112	Steel (cast).	128	Varnish.
113	Steel (mild).	129	Water.
114	Stone, ballast.	130	Wattle.
115	Stones.	131	Wax.
116	Stove gas.	132	Weights, brass.
117	Tanine extract.	133	Wires (copper, steel, etc.).
118	Tar.	134	Wood Tar.
119	Thermograph.	135	Yarns.
120	Thermometer.	136	Zinc.

M21ISD—400—26-7-26—GIPS